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**EXPRESSED HUMILITY IN INTER-
ORGANIZATION INTERACTIONS: WHY
AND WHEN BOUNDARY-SPANNING
LEADERS' EXPRESSED HUMILITY CAN
PROMOTE PARTNER COOPERATION
COMMITMENT**

YANG, WENHAO

SINGAPORE MANAGEMENT UNIVERSITY

2023

Expressed Humility in Inter-organization Interactions: Why and
When Boundary-spanning Leaders' Expressed Humility Can
Promote Partner Cooperation Commitment

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Submitted to Lee Kong Chian School of Business
in partial fulfillment of the requirements for the Degree of
Doctor of Business Administration

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I hereby declare that this DBA dissertation is my original work and it has been written by me in its entirety. I have duly acknowledged all the sources of information which have been used in this dissertation.

This DBA dissertation has also not been submitted for any degree in any university previously.

A handwritten signature in black ink, appearing to be 'Yang Wenhao' in a stylized cursive script.

Yang, Wenhao

25th July, 2023

Expressed Humility in Inter-organization Interactions: Why and When Boundary-spanning Leaders' Expressed Humility Can Promote Partner Cooperation Commitment

Yang, Wenhao

Abstract

In an organization, expressing humility can promote more meaningful and satisfying relationships with others. Given its potentially positive effects, researchers have been interested in studying the promotion and management of expressed humility for decades. Although there is some literature on the mechanism of expressing humility within an organization, none of them has pointed out the positive effects of expressed humility between organizations represented by their boundary-spanning leaders. Specially, no research efforts have been devoted to understanding how expressed humility between partners affects the economic behavior and outcomes of organizations and when it is effective for positive effects.

In this paper, I focus on the impact of partner relationship between boundary-spanning leaders. I propose that expressed humility is an effective tool for promoting interpersonal relationships, which ultimately strengthen organizational ties. However, since humility is a social norm, it can be challenging for the other party to judge whether the humility expressed by leaders is sincere or not. Therefore, this paper uses attribution theory to explain the different impacts of leaders' expressed humility on inter-organizational cooperation commitment through attributed motives.

To test the research model, I collected multiple sources of data from 248 pairs of leaders and their followers who have relevant experiences working as leaders of organizations in bilateral business projects. Results from the main

analyses and a series of supplementary analyses indicate that partner's expressed humility has a positive mediated effect on inter-organizational cooperation commitment through knowledge sharing. Moreover, results from the moderating effect analyses show that attributed-motive for performance improvement has a moderating effect on the positive relationship between expressed humility and inter-organizational cooperation commitment. However, when the leader's humility is attributed-motive for impression management, expressed humility does not have a significant effect on the relationship between expressed humility and inter-organizational cooperation.

The paper provides insights into how boundary-spanning leaders can build stronger organizational relationship and offers managerial implications for organizations in the inter-organizational exchange in emerging markets. Overall, this study contributes to the literature by providing a nuanced understanding of the impact of interpersonal relationships on inter-organizational cooperation commitment in the Chinese context.

Keywords: Expressed Humility, Inter-organizational Cooperation

Commitment, Boundary-spanning Leaders

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Acknowledgement

I would like to express my sincere gratitude to my Committee, family and friends I encountered during my DBA journey. Throughout my studies, Prof Tan Hwee Hoon, my Committee Chair, offered me attentive and rigorous guidance on the research design and the academic writing which benefits me not only in this research project but also in my future work. I would like to extend my appreciation to my Committee, Prof. Tian Xinmin and Prof. Jiang Ming at SJTU, Prof. Angela Leung at SMU, for their insightful comments and feedback on my research.

Then, I would like to thank Ms. Elaine Gao and her team, and my DBA cohorts. Your encouragement and sincere friendship moved me and will be remembered throughout my life.

Last but not least, I would like to thank my wife and two sons. Family support brings me more courage and propels me forward.

Chapter 1 Introduction

With the advent of strategic emerging markets, researches on relationship have been extended to the organizational level (e.g., Park & Luo, 2001; Uzzi, 1997; Zhang et al., 2010). Relationship is an important channel of communication among organizations, especially in those industries where the system and market environment are underdeveloped (Peng & Heath, 1996), and has become a new strategic tool for companies to promote their development, which mainly work for obtaining scarce resources through personal channels (Luo, 2007) and forming cooperation through informal channels (Granovetter, 1985).

Although the importance of relationship has been widely recognized, there is still a lack of understanding of the relationship in inter-organizational exchange, and whether (and how) interpersonal relationship between individuals can benefit inter-organizational cooperation commitment in terms of the quality of the exchange relationship. As Palmatier, Dant, and Grewal (2007) correctly identify, existing research on inter-organizational exchange involving relationship or networks is relatively limited. To address this research gap, this study examines the interpersonal relationship between boundary spanners from inter-organizational exchange in emerging markets, as well as the linkage mechanisms between boundary-spanning leadership and inter-organizational cooperation commitment.

When seeking business cooperation, boundary spanners are key representatives of their organizations (Aldrich & Herker, 1977). They may be employees from different levels within the organization, such as sales staff and individual sellers at junior levels (Su et al., 2009), or managers and leaders at senior levels (Westphal et al., 2006). As decision-makers in the organization, boundary-spanning leaders will have a stronger impact on inter-organizational cooperation commitment. A high-quality interpersonal relationship between boundary-spanning leaders helps to strengthen the formal communication and connection between both organizations, from this perspective, interpersonal relationship is embedded into inter-organizational cooperation commitment to some extent. So, it is a good way to analyze the attitudes and behaviors of boundary-spanning leaders in order to better judge and understand the inter-organizational decision-making and relationship. In fact, the above analysis has a theoretical basis-rooted in social embeddedness theory (Uzzi, 1997).

According to the social embeddedness theory, economic behavior is embedded in interpersonal relationships (Wright et al., 2005), meaning that organizational decisions are influenced by relationships between individuals. Interpersonal relationship refers to the social relationship that emphasizes emotional color, which is established in the practice of long-term social interaction such as daily work and life. Here, we need to

further point out that the interpersonal relationship that we are study can be established in work.

Boundary spanners are embedded in a relationship network to complete work (Chen et al., 2009; Uhl-Bien, 2006; Wayne et al., 1997). Among the various ties in these networks, these relationships can be divided into two types (Boyd & Taylor, 1998; Ibarra, 1993; Lincoln & Miller, 1979). The first type captures relationship established on work ties through which the resources and influence related to work are exchanged. The second type represents relationship generated by social interactions outside the workplace, involving more social and emotional goals (including intimacy and companionship), which becomes non-work-related or private ties (Boyd & Taylor, 1998). In the early stage of seeking business cooperation, it mainly depends on the informal working ties to make a deal between both organizations (Zhang, 2015). Therefore, this study focuses on the impact of exchange of work ties between boundary-spanning leaders.

However, since in the early stage of business cooperation, boundary-spanning leaders start in a personally unfamiliar state with low understanding of each other, how to build a high-quality interpersonal relationship between them is very important to inter-organizational cooperation commitment. We propose an effective tool for promoting interpersonal relationships, and that is *humility*. Humility is a virtue that has a deep root

in the history and culture of China. From ancient times to the present, humility is highly valued. We believe that boundary-spanning leaders express humility in order to build better interpersonal relationships and further strengthen organizational ties. In the following content, we focus on how this effect is established.

Although we believe that boundary-spanning leaders' expressed humility has a positive impact on inter-organizational cooperation commitment, we consider a situation where the positive role of humility in the Chinese scenario has always existed. In the Chinese context, since humility is a social norm, it is hard for the other party to judge whether the humility expressed by leaders is sincere or not (Bond et al.,1982). Whether two parties are attracted depends not only on the traits and behaviors of one party (*Trait Theory*, Barrick et al., 2013), but also on the interpretation of such traits and behaviors by the other party (*Situational Theory*, Vecchio & Robert, 1987). Therefore, the impact of the leaders expressing humility relies on the interpretation as well. In this paper, we find two types of motivation to explain expressed humility: attributed-motive for performance improvement, and attributed-motive for impression management. We are able to identify the different impacts of the leaders' expressed humility on knowledge sharing, and in addition to the interpersonal relationship, the inter-organizational cooperation commitment is also further affected through the attributed motives of expressed humility.

This study intends to explore the impact of boundary-spanning leaders expressing humility on the inter-organizational cooperation commitment based on social embeddedness theory. Social embeddedness theory is the fundamental theory to explain the governing mechanisms of personal relationship. The central concept that social embeddedness refers to is the influence of prior ties on subsequent economic behaviors. However, humility may be interpreted differently in different situations, which affects the positive effect of expressed humility on inter-organizational cooperation commitment. Therefore, we use social embeddedness theory for explaining the impact between interpersonal relationship and inter-organizational relationship (i.e., inter-organizational cooperation commitment) in inter-organizational exchange. In addition, we employ attribution theory to explain the effect of attributed motives on main effect.

In examining interpersonal relationship between boundary spanners in inter-organizational exchange in the process of seeking business cooperation, this study seeks to make the following contributions to the existing literature on expressed humility: (1) social embeddedness theory is used to explain the effect of expressing humility by boundary-spanning leaders on the inter-organizational cooperation commitment and to validate the working ties from the micro-level among boundary-spanning leaders' expressing humility, and whether it influences (and how it affects) inter-organizational exchange relationship from the macro-level; (2) through the attributed motives of

expressed humility, this study seeks to find the boundary condition of the positive effect of expressed humility on the inter-organizational cooperation commitment.

In addition, this study has practical contributions as well. The findings of this study provide several fruitful managerial implications for organization in the inter-organizational exchange of emerging markets: First, this study validates the importance of personal relationship in China in general, and further suggests that interpersonal relationship between boundary-spanning leaders is an effective relational governance tool for managing inter-organizational relationship in emerging markets. Despite the potential effects of personal ties in emerging markets (e.g., collective blindness, corruption) implied in several studies (Anderson & Jap, 2005; Gu et al., 2008), our research maintains that a strong interpersonal relationship cultivated between boundary-spanning leaders is associated with better quality of exchange relationship. Second, this study explores how the positive impact of interpersonal relationship quality works through boundary-spanning behaviors in exchange activities. This suggests that, in order to develop mutually favorable relationship, both organizations can encourage formation of ties between boundary spanners or promote boundary spanners' behaviors. Third, this study further verifies that expressed humility contribution to build high-quality interpersonal relationship and further promote business cooperation through boundary-spanning leaders. Therefore, this study provides an effective scheme for boundary-spanning leaders to promote task

performance; that is, expressed humility by boundary-spanning leaders is an effective tool in business cooperation. And fourth, this study points out that the different attributed motives of expressed humility have different effects on inter-organizational cooperation commitment. Therefore, this paper provides further guidance for boundary-spanning leaders for why they should not let his partner feel insincere when expressing humility.

Chapter 2 Literature Review

In this chapter, I review the literature on social embedded relationship (with an emphasis on interpersonal relationship) and boundary-spanning leadership. After reviewing each of these two research streams, I also review the literature on expressed humility and inter-organizational relationship for advancing management research in this area, all of which serve as the theoretical background in formulating my research model. I conclude this chapter with an overview of how my dissertation research contributes to above streams of work.

2.1 Social Embedded Relationship Perspective

The concept of relationship originated in anthropology and sociology. Beginning in the 1970s, relationship is introduced into organizational research, and the interest in it has since been growing (Granovetter, 1973; Uzzi, 1997). Scholars who examine the characteristics of interpersonal relationship have defined relationship as the ongoing reciprocity and friendship between individuals (Luo, 2007), or the close relationship, liking for, and friendship generated from social activities and business transactions (Adobor, 2006; Marsden & Campbell, 1984). Consistent with Granovetter (1973), interpersonal relationship discussed in this article are assumed to be dyadic, positive, and symmetric, and are subjectively perceived based on social interactions.

Due to the emphasis on social governance's interpretation of interpersonal relationship, social embeddedness theory, social capital theory, and social network theory have been widely used by researchers. However, among the above theories, both social network theory and social capital theory are derived from social embeddedness theory (Barden & Mitchell, 2007). Social embeddedness theory is the fundamental theory which refers to the effect of prior relationship on subsequent economic behaviors. Therefore, social embeddedness theory provides an effective framework to understand the relationship between interpersonal relationship on subsequent performances (i.e. inter-organization relationship) in seeking business cooperation.

The term "embedded" refers to the phenomenon in which one system is organically integrated into another system or one thing is endogenous to other things. Bullock (2007) first proposed the concept of "embeddedness" to analyze the interaction between human economic behavior and non-economic social relations or social structures. In his opinion, economy is not self-sufficient as it is said in economic theory, but has a close relationship with politics, religion and social relations. In contrast to economically embedded social relations, social relations are embedded in the economic system (Bullock, 2007).

The American sociologist, Granovetter, who truly inherited and developed Polanyi's concept of "embedding", divided social embedding into two types: relational

embedding and structural embedding. Specifically, relational embedding refers to the behavior of a single subject embedded in the network of relationships that they directly interact, and it brings useful information for exchange. Structural embedding examines the overall structure of various networks composed of multidimensional embedding relationships of behavioral subjects (Granovetter & Swedberg,1992). Compared to Polanyi's view, where economic activity is firmly attached to the integrity of the whole society, the embeddedness view of Granovetter tends to be an intermediate theory, that is, embeddedness is an impact mechanism in the middle-level.

Embeddedness is originally rooted in the generation, development, and growth of American soil. In the early 21st century, embeddedness theory was introduced into China, and it was mainly used in the fields of state-local relations, institutional changes, and social governance. With the continuous development of social embeddedness theory, relationships have become the most important structural factor in explaining the degree of social embedding and social interaction effects (Zukin & DiMaggio, 1990).

According to social embeddedness theory, economic behaviors are embedded in interpersonal relationship, and organization decisions may be influenced by interpersonal relationship. It is ubiquitous to make use of personal relationship to develop business in many emerging markets (Wright et al., 2005). Granovetter (1973, 1985) and Uzzi (1997) propose that economic actions are embedded in the network of

relationship to achieve organizational goals. The microscopic relationship between individuals not only affects their behaviors, it also affects the macro performance of the organization to which individuals belong (Uzzi, 1997). In inter-organizational communication, the transactions are initiated and executed by individuals just the same as other business transactions (Tsang, 1998).

Although the relationship between individuals is regarded as the “personal property” of an individual, it also affects his/her organization (Zhang & Zhang, 2006). By the way of establishing relationships of appropriate interactions, it can effectively help him acquire the resources to complete organizational tasks, to increase organizational productivity, and to expand business transactions (Park & Luo, 2001). According to the logic of social embeddedness theory, we believe that inter-organizational exchange activities are embedded in the social relationship of those who are involved in the exchange. Therefore, we hope that the strong relationship formed between personnel involved in the exchange, especially the boundary-spanning leaders, will help the exchange relationship between organizations to achieve higher performance.

2.2 Boundary-spanning Leadership

Organizations depend on external environments for critical resources and business opportunities in order to survive and grow (Stock, 2006). According to boundary-spanning theory (Aldrich & Herker, 1977), organizations rely on boundary spanners to

ensure that the social and economic exchange between an organization and its external environment are executed smoothly, and the organization is thus protected from disruptive external environmental forces. To achieve these goals, boundary spanners play major roles (Aldrich & Herker, 1977).

When performing the role of information processing, boundary spanners receive information from the external environment, which they decode, filter, and translate before passing it to relevant internal users (Aldrich & Herker, 1977; Tushman & Scanlan, 1981). Boundary spanners also share appropriate internal information with external organizations. Facilitating two-way information flow and sharing, boundary spanners serve as a bridge between the organization and the external environment (Stock, 2006).

In inter-organizational exchange, communication is an information transmission process, serving as the bond that holds exchange parties together (Mohr & Spekman, 1994). Similarly, knowledge sharing, as one of the most efficacious methods through which organization acquire knowledge from each other (Foy, 1999), is a learning facilitation process that helps develop favorable relationship between exchange parties (Griffith, Zeybek, & O'Brien, 2001). As such, we identify communication and knowledge sharing as two important information processing behaviors of boundary spanners engaged in inter-organizational exchange.

Boundary spanners are the main representatives of various activities on the organizational boundaries. They not only support the exchange of information with the external environment, but also facilitate the responses of organization to environmental impacts (Tushman & Scanlan, 1981). Boundary-spanning leaders are the embodiment of organizational representatives, whose attitudes, speeches, and behaviors represent organization, to help organization to communicate, to obtain information and to understand the changes in the external environment (Tushman & Scanlan, 1981). They are also the decision makers in their organization, and have a more important impact in the inter-organizational cooperation commitment. The boundary-spanning leaders from one company are referred as “Partner A”, while those from the other company are referred as “Partner B”. The leaders involved in business decision-making and operations may be affected by the personal relationship between each other. Strong ties can help boundary-spanning leaders to perform the boundary roles given by the organization; in particular, personal relationship is an important basis for sharing information (i.e., information processing; Huang et al., 2016).

High-quality boundary-spanning behaviors, in turn, will benefit the organization represented by boundary spanners and foster good relationship with their partners (Huang et al., 2016). A strong connection can help boundary spanners perform a cross-boundary role in two ways: (a) act as a solid foundation for connecting and sharing

information with the other (that is, information processing), and (b) act as a relationship lubricant for effective cooperation and problem solving (that is, external representation). These enhanced cross-boundary behaviors in turn benefit establish better inter-organizational cooperation commitment. In addition, as decision-makers in the organization, boundary-spanning leaders will have a stronger impact on inter-organizational cooperation commitment. This study focused on relationship between boundary-spanning leaders.

Managers fulfill their responsibilities as external representatives of the organizations by promoting resource sharing, communicating ideas and expectations, and providing coordinated assistance to the external environment (Aldrich & Herker, 1977). Through boundary-spanner, organization are interconnected to induce cooperative behavior in order to achieve common goals (Zollo et al., 2002). In inter-organizational communication, cooperation refers to similar or complementary coordinated actions taken by the communicating parties to achieve a common result (Anderson & Narus, 1990). On the one hand, exchange makes organizations increasingly interdependent, and cooperation becomes more and more important. On the other hand, when accidents and conflicts occur, boundary-spanners are needed as a channel to solve problems, through rational persuasions and joint actions (Friedman & Podolny, 1992). Therefore, we believe the information process to be an important external manifestation that boundary-spanners perform.

2.3 Humility and Expressed Humility

Humility (“谦逊” in Chinese characters) has a long history in China, the word “qian (谦)” is composed of “speak (言)” and “merge (兼)”, which implies that one should consider the interests of oneself as well as those of others when speaking. From ancient to modern times, humility is valued in the Chinese society and stories such as “Kong Rong Sharing Pears” and “Be Extremely Open-minded” have been widely spread in China.

Consistent with and building from previous definitions and conceptualizations (Exline & Geyer, 2004; Ryan, 1983; Tangney, 2000), humility is a desirable personal quality reflecting the willingness to understand the self (identities, strengths, limitations), combined with perspective in the self’s relationship with others (i.e., perspective that one is not the center of the universe). This emphasis on both an awareness of the personal facets of self and perspective in relationship suggests that humility allows individuals to develop a holistic self-concept (Gecas, 1982) and exercise discernment in their behaviors toward others. Thus, humility encourages the individual to be more sentient about the self and its relation to others. Several key components are integral to this concept of humility.

Humility has rich theological and philosophical roots (Templeton, 1997; Grenberg, 2005), and is a relatively stable trait that is grounded in a self-view that something

greater than the self exists (Morris et al., 2005). In essence, humble people accept that they are not the center of the universe (Templeton, 1997). They recognize their insignificance in comparison with (1) moral laws (Grenberg, 2005), (2) universal truths or superior powers (Morris et al., 2005), (3) responsibilities for others (Peterson and Seligman, 2004), or (4) the larger collective or community (Tangney, 2002). Given that humility is essentially a self-based trait (Tangney, 2002; Peterson and Seligman, 2004), self-experience framework of Baumeister & Jones (1978) is adopted to define the content domain of humility. The framework suggests that individuals experience who they are through three categories form a comprehensive and coherent domain of self-experiences.

First, we find that a willingness to develop an awareness of personal strengths as well as limitations emerges as a fundamental and common theme to humility. For example, in building an operational definition of self-esteem, Ryan (1983) noted that humility allows for realistic assessment of one's own strengths and weaknesses. As Exline and Comte-Spoonville (2001) highlighted, humble individuals will thus assiduously seek out and thoroughly consider the opinions and ideas of others in order to gain a realistic sense of their own capabilities as well as limitations. Thus, through this first dimension, individuals with humility hold neither inappropriately grandiose nor self-deprecating views of themselves but rather possess realistic visions of who they are and what capabilities they possess. This also likely holds great appeal with others as individuals

with humility do not react defensively toward criticism and are able to take in positive information about the self judiciously (Ryan, 1983)

Second, people with humility are actively engaged in utilizing information gathered in interactions with others, not only to make sense of, but also, when necessary, to modify the self. That is, their self-views are focused on their interdependence with others rather than their independence from others. In previous research, Tangney (2000) suggested that a central part of humility is an “others” orientation. Specifically, when speaking of a person who has gained a sense of humility, Tangney stated that “his or her focus is on the larger community, of which he or she is a part”. Therefore, we describe humble individuals as characterized by relational and collective identity orientations, defining themselves in terms of their relationship to others (Brickson, 2000).

Finally, scholarly definitions state that humility enables people to consider themselves in relation to a greater whole. For example, humility keeps accomplishments in perspective (Exline & Geyer, 2004; Tangney, 2000). Ryan (1983) suggested that humility permits interpretation of life events in regard to a broader context. Likewise, Morris et al. (2005) used the term *transcendence* to describe one’s “acceptance of something greater than the self” (Morris et al., 2005). Thus, transcendence allows consideration of the world beyond simple in-group membership (collective identity orientation) and a more complex sense of a larger reality as well. As a result of holding

this perspective, humble people are not overly focused on personal or even group gains or agendas exclusively, nor do they consider themselves to be superior to others.

With the recognition of the connotation of humility by Confucianism, Taoism and Buddhism, humility has gradually become the moral norm of Chinese society. Virtues such as humility are of great interest and are considered crucial to the character of persons who work within organization. Humility has been identified as one of “core” organizational virtues that provide the ethical foundation for an organization’s environment (Cameron et al., 2003). Humility is increasingly important for leaders who guide their organization in a changing and turbulent environment.

Academically, expressed humility is defined as an interpersonal characteristic that emerges in social contexts (Owens & Hekman, 2012). Although the virtue of humility can be traced back a long time ago, the concept of humility varies in philosophy, theology, and psychology. These different concepts make it difficult to reach a consensus on its definition. In addition, attempts to integrate different concepts of humility from these domains have led to complex definitions. In some cases, the definition covers of up to 13 different dimensions (Vera & Rodriguez-Lopez, 2004), making humility a structure that is difficult to understand and measure. According to Owens & Hekman (2012), expressed humility is defined as an interpersonal characteristic that emerges in social contexts that connotes (a) a manifested willingness

to view oneself accurately, (b) a displayed appreciation of others' strengths and contributions, and (c) teachability. These components are the core reflective indicators of humility (Bollen & Lennox, 1991) and are tightly interrelated.

Expressed humility comprises a pattern of behaviors that occur in interpersonal interactions and is therefore observable by others (Owen & Hekman, 2012). Though individuals may have a baseline penchant for expressing humility that is based on genetics, socialization, and life experiences, the expression of a person's humility may vary according to contextual cues and circumstances (Mischel & Shoda, 1995). We have elaborated in detail each of the components of humility defined by us above, though we focus on external, observable behaviors that can be perceived by others. This study will focus on humility regarding the motives and cognitions that are thought to undergird the behavioral manifestations of humility.

2.4 Inter-organizational Relationship

According to the literature on relation markets, we use relationship quality to measure inter-organizational relationship. Relationship quality is a multidimensional structure that captures different but related aspects of relationship (Palmatier et al., 2006). The Evaluation the relationship quality between both cooperative organizations can be approached from three aspects: trust, commitment, and satisfaction (Huang et al., 2016).

On one hand, when both boundary-spanning leader are characterized by bilateral convergence, trust and commitment emerge (Kumar et al., 1995). However, trust and satisfaction are unlikely to occur in a lower degree of interdependent relationship, because the emotions of such a relationship are weak. In a high-quality relationship, the two partners will have a strong incentive to build, maintain, and strengthen the relationship with each other, and have stronger trust and satisfaction to achieve a win-win situation (Kumar et al., 1995; Anderson & Weitz, 1992).

On the other hand, high-quality relationship between both organizations is also expressed in terms of satisfaction. If organizational cooperation should take satisfaction as an effective basis for evaluating the results, it is the most direct reflection of inter-organizational relationship (Geyskens & Steenkamp, 2000). Therefore, the degree of trust, commitment, and satisfaction among organization can measure three separate aspects of the quality of inter-organizational relationship.

Chapter 3 Hypothesis Development

In this chapter, I present the logic flow of my research model and offer conceptualizations of the key constructs. In addition, I detail the development of the study hypotheses. Finally, I present a supplementary theoretical model, and offer a brief summary of the rationale for this model.

3.1 Expressed Humility and Inter-organizational Cooperation Commitment

In an organizational environment, the humility we expect to express will promote a more meaningful and satisfactory relationship with others (Means et al., 1990; Exline et al., 2004). A large number of companies organize their employees into teams, hoping to promote the synergy of experience, skills and knowledge, and encourage mutual guidance and peer supervision. However, studies have shown that the expected performance of a team is often not achieved due to the fact that team members are not humble (Owens & Hekman, 2012). Members with characteristics such as arrogance are easily excluded by other members of the team, thereby undermining the team's operations (Anderson et al. 2006; Horowitz et al. 2006), and on the contrary, showing humility (recognizing personal errors and weaknesses, accepting feedback, and acknowledging the strengths and contributions of other team members) can effectively facilitate the operation of the team, making it more likely that team members will treat humble members as contributors in the team's efforts.

Although, there is literature exploring the mechanism of humility within organization (Morris et al. 2005; Exline et al., 2004; Tangney, 2002; Templeton, 1997; Means et al. 1990), none of these has pointed out the positive effect of expressed humility between both organizations represented by their boundary-spanning leaders, who also have individual characteristics. Why does expressed humility enhance relationship between both organizations? We can get the answer from the following text that an interview from a leader of a small-sized enterprise (a logistic company in Shanghai):

Interview cases:

There is a Chinese saying, “courtesy costs nothing”, which means do more courtesy to people, people do not blame, that is, courtesy is indispensable. Those people who understand the world, will know the norm of social intercourse. No matter what the others are like, we should first do a good job of courtesy and maintain a consistent polite behavior. This is not only a matter of personal quality, but also related to whether you can get others' recognition and favor. Courtesy is never too much, but too little. For example, if you treat people casually when they come to visit you, even if they don't notice anything wrong, you may find that the conversation between them becomes less frequent and sometimes there is a cold silence. On the contrary, if you are a little more courtesy and hospitality to people, the emotional exchange between the host and guests will be better.

We also need to show more courtesy in business cooperation, such as expressing humility. We can win trust from our partners and promote the relationship between both parties effectively when expressed high-level humility. On the contrary, our partners will think we are arrogant, unapproachable and impolite, when we expressed low-level humility in business cooperation. Therefore, expressed humility will affect the effectiveness of communication between both parties, which will lead to win-win results. The further development the relationship between both organizations depends on the cooperation result. In other words, win-win cooperation can enhance the relationship between both organizations, and conducive to secondary cooperation. Thus, I will continue to express my humility to enhance our relationship with our partners. (text information comes from interviews)

Based on the above story, this study believes that expressed humility is an important factor for inter-organizational cooperation commitment, which has a positive effect on inter-organizational relations. As boundary-spanning leaders, they represent their own organizations, and if there is a close working relationship, it will help to form a good exchange relationship, create an environment for both parties to achieve cooperation and solve problems, and then strengthen the relationship between both organizations. It is important to construct high-quality working relationship between both boundary-spanning leaders to strengthen the formal communication and connection in

organization exchange, which further enhances the inter-organizational cooperation commitment. In addition, since boundary-spanning teams participate in the entire cooperation process, the effectiveness of teamwork (such as whether there is trust, commitment, and satisfaction) reflects the inter-organizational relationship they represent to a certain extent (Huang et al., 2016). Therefore, I believe that the way to build a high-quality relationship through expressed humility between both boundary spanners (that is between Partner A and Partner B) is very important to inter-organizational cooperation commitment, for the following reasons.

First, because individuals who express humility show a willingness to see themselves accurately (Owens & Hekman, 2012), expressed humility helps boundary spanners to properly assess their own strength and enhance self-awareness. Appropriate assessments can affect decisions about how much time and efforts should be allocated to performance-related tasks. For example, those who overestimate their abilities may allocate less time and energy than needed, leading to missed deadlines or giving up the quality just for completing tasks on time, which will result in a decline in performance. However, those individuals who are willing to see themselves accurately will have a more accurate understanding of their abilities, and thus they hold a more realistic view of how much time and energy required to achieve performance expectations. Humble individuals with this ability of self-reflection also “play to their strengths” wherever possible and seek help or feedback on tasks which they may be weak on.

Second, the teachability of expressed humility suggests that humility is related to openness to feedback (Owens & Hekman, 2012). Humble people are more likely to learn from their mistakes and take remedial measures after poor performance, resulting in higher overall performance over time.

Third, being humble includes appreciating the strengths of others (Owens & Hekman, 2016). In terms of performance, highly modest people should be less likely to underestimate the advantages of those around them. As a result, those who are humble are more likely to notice and benefit from the positive role models of high-performing employees.

Thus, in the process of seeking business cooperation, expressed humility of boundary-spanning leaders can help to accurately recognize themselves and evaluate the time and effort needed to evaluate the performance of corporate cooperation effectively. Humility can also help to avoid the same mistakes in business cooperation by drawing on the past experience. Expressed humility leaders are also better at finding something from other partners and learning continuously in the process of cooperation, so as to form a good working atmosphere among partners. In general, this study argues that expressed humility of boundary-spanning leaders help to build a cooperative relationship for their organization.

In addition, this study proposes that social embeddedness theory can effectively explain the above-mentioned effects. As discussed, social embeddedness theory (Granovetter, 1973, 1985; Uzzi, 1997) argues that economic action is embedded in the structure of relationship and personal relationship. The microscopic relationship between individuals not only affects the behavior ability of individuals, but also affects the macro performance of the organization to which individuals belong (Uzzi, 1997). Therefore, the analysis of relationship provides a necessary and productive tool for understanding the micro-macro links in inter-organizational communication and relationship. Like other commercial transactions, trades are initiated and executed by individuals in inter-organizational transactions (Tsang, 1998).

Following the logic of social embeddedness, we believe that exchange activities between both organizations are embedded in the social relationship of the people involved in the exchange. Therefore, we expect a strong relationship to form between people, especially the boundary-spanning leaders involved in the exchange, and to obtain excellent performance from the exchange relationship. Therefore, this study believes that the expressed humility of boundary-spanning leaders, promoting cooperation among boundary spanners, will further increase the inter-organizational cooperation commitment.

Following the principles of social embeddedness, we hold that exchange activities between organizations are rooted in the social relationships of the individuals engaged in the exchange. As such, we anticipate that a strong bond will develop between these individuals, particularly the boundary-spanning leaders involved in the exchange, resulting in outstanding performance from the exchange relationship. Accordingly, this study posits that the demonstrated humility of boundary-spanning leaders will further enhance their commitment to inter-organizational cooperation.

3.2 The Mediating Effect of Knowledge Sharing

Although social embeddedness theory provides an overall framework for revealing the impact of boundary relationship on exchange relationship, the internal mechanism of such effects is unclear. Regarding inter-organizational communication, we believe that the impact of individuals on the organization must play a role through personal behavior and interaction. In other words, we believe that in the exchange activity, the boundary-spanning behavior mediates the relationship between the boundary-spanning relationship and the exchange relationship, and the effect is explained from the boundary-spanning perspective.

Under relatively unfamiliar conditions, team members need to establish mutual willingness to knowledge. This willingness to share information is established through team tasks rather than social feelings (Chen & Francesco, 2003). We believe that

expressed humility can quickly establish a willingness to share between both boundary-spanning leaders. Expressed humility can promote the knowledge sharing behavior in an unfamiliar environment, thereby quickly forming a sharing atmosphere, allowing individuals' experience and sharing information in the process of cooperation.

Combined with socially embedded relationship perspective, we believe that knowledge sharing between both boundary-spanning leaders is an important manifestation of boundary-spanning behavior between both organizations. Knowledge sharing, as a manifestation of information processing behavior (Mohr & Spekman, 1994) represents a timely two-way transmission of knowledge, including the knowledge of product, competitiveness, market and competitors. In inter-organizational communication, although the dominant power of negotiation and communication is in the hands of individuals (Tsang, 1998), as an important link between both organizations, the behavior of employees, although personal, will affect their organizations (Zhang & Zhang, 2006). Individuals can effectively help to obtain the resources and skills needed to complete organizational tasks, increase organizational productivity, and expand business transactions through interaction and fulfillment of obligations (Park & Luo, 2001).

According to the logic of social embeddedness theory, we believe that the inter-organizational exchange activities are embedded in the social relationship of boundary

employees participating in the exchange. Therefore, we expect a strong relationship to establish between people, especially the boundary-spanning employees who participate in the exchange, which will help the participating organization to achieve excellent results from the exchange relationship.

Boundary-spanning leaders play an important role in inter-organizational communication with decision-making power at the strategic level, and usually use exchange relationship to familiarize and master a series of relevant information and knowledge to organize and develop strategic planning and other tasks, social embeddedness theory organizational positioning and select targeted market. Therefore, knowledge sharing is very important for the cooperative relationship between both organizations, and it is also an important way to achieve the cooperative performance in the end. Expressed humility can not only establish exchange relationship between boundary-spanning leaders, but also improve the closeness of the relationship among boundary spanners and finally establish a sharing relationship through the attraction of humility. Specifically, it promotes closeness among individuals in the following ways.

Firstly, expressed humility can make boundary spanners feel the sincerity of the leaders. Anderson (1968) found that sincerity is the most important factor affecting interpersonal attraction based on the study of 555 words describing traits. Therefore, the sincerity shown by boundary-spanning leaders through humility can improve the

closeness of the relationship and establish an intimate relationship. Secondly, expressed humility can recognize the advantages and contributions of boundary spanners, and humbly learn from others (Owens & Hekman, 2012). Nielsen et al. (2010) point out that expressed humility has relational identity orientation, and the boundary spanners are more concerned with the needs of others. Therefore, expressed humility will make boundary spanners from one side feels that what they lack is supplemented from the other side. In other words, expressed humility of boundary-spanning leaders (Partner B) may prompt the boundary spanners to maintain a better sharing relationship with their partners, resulting in more knowledge sharing behavior, which is generated by the perceiving party (Partner A).

In addition, knowledge-sharing behaviors help create an environment in which more representatives of both organizations communicate with each other and further enhance inter-organizational closeness. Therefore, knowledge sharing is an important way to enhance Inter-organizational cooperation commitment. A high level of knowledge sharing among boundary-spanning leaders can help build strong connections and achieve excellent results in the process. Based on the above analysis, this study puts forward the following hypothesis:

***H1:** Knowledge sharing positively mediates the impact between expressed humility and inter-organizational cooperation commitment.*

3.3 The Moderating Effect of Attributed Motives of Expressed Humility

Although interpersonal relationship will be affected by time and intimacy, the intimacy of boundary spanners is relatively stable, and their relationship is mainly determined by individual cognition in the process of seeking cooperation. In business cooperation, the behaviors of two parties not only depends on the traits and behaviors of one party (Trait Theory, Barrick, Mount, & Li, 2013), but also depends on the interpretation of such traits and behaviors by the other party (Situational Theory, Vecchio & Robert, 1987). As expressing humility is a behavior pattern, humble communication can attract subordinates through preferences for traits. In China, because humility is a normal behavior, expressed humility does not mean the true thoughts of boundary spanners, and it is just a polite behavior in seeking cooperation (Bond et al., 1982). Therefore, the expressed humility to the partner's interpersonal relationship is influenced by the boundary spanners' interpretation from the other party.

Both cognition and motivation drive behavioral manifestations of self-awareness, openness to feedback, and appreciation of others. Although individuals may exhibit humble behaviors without incorporating a transcendent self-view, such behaviors may be inauthentic or inconsistent over time. We can clearly know the different effects of partner leaders' expressed humility on knowledge sharing through attribution theory. According to the Attribution Theory, evaluating the quality of Inter-organizational cooperation commitment can be analyzed from three aspects: trust, commitment, and

satisfaction (Huang et al., 2016). When both boundary-spanning leaders are characterized by bilateral convergence, trust and commitment emerge (Kumar et al., 1995). However, trust and satisfaction are unlikely to occur in a lower quality of exchange relationship, because the emotions of such a relationship are weak. In a high-quality relationship, the two partners will have a strong incentive to build, maintain, and strengthen the relationship with each other, and have stronger trust and satisfaction to achieve a win-win situation (Kumar et al., 1995; Anderson & Weitz, 1992).

On the other hand, high-quality relationship between both organizations is also expressed in terms of satisfaction. If organizational cooperation should take satisfaction as an effective basis for evaluating results, it is the most direct reflection of Inter-organizational cooperation commitment (Geyskens & Steenkamp, 2000). Therefore, the degree of trust, commitment, and satisfaction among organizations can measure three aspects of the quality of inter-organizational cooperation commitment. This study applies social cognitive theory to explain behaviors. It aims to control people's environment and behavior under its influence by analyzing and inferring the causality of the behaviors. How the perceiver judges and explains the causes of actions of others and oneself is the fundamental problem to be solved by attribution theory. This theory attempts to explain the various principles of attribution according to different attribution processes and their functions, and is used to understand, predict and control their environment and the actions accompanying it.

In the process of seeking business cooperation, the attributed motives of expressed humility refer to the perceived motivation of humility expressed by the other boundary-spanner leaders from their own perspectives. When expressed humility has different motivations, it will exert different effects on their behavior (Lam et al., 2007; Owens & Hekman, 2016). In previous studies, when investigating and expressing the impact of humble leadership on other partner, they only used the leader-centric paradigm to take subordinates as the recipients of leadership influence, and seldom considered interpretation of other partner for leadership behavior. This paper breaks down the effect of the expressed humility within the organization when revealing the effect of humble leadership. It will further explore the regulation mechanism under which expressed humility will influence the Inter-organizational cooperation commitment, and further enrich the study of the effectiveness of humility.

The analysis on the expressed humility by boundary-spanning leaders is based on the motivation of leaders to express humility from the perspective of boundary spanners in their counterparties, which can be mainly divided into two types: Performance Improvement and Impression Management (Dienesch & Liden, 1986; Green & Mitchell, 1979; Kelley, 1967).

(a) Attributed-motive for Performance Improvement

Attributed-motive for performance improvement refers to the individual belief (that is Partner B) that expressed humility is achievement-oriented and performance-oriented. When the attributed-motive of expressed humility is for performance improvement, the perception matches the behavior, thus it will increase the interpersonal attraction of boundary spanners (Morrison & Bies, 1991). At the same time, Partner A will prompt to seek other relevant clues that Partner B pays attention to performance and pursues excellence though verify motivation, thus it further increasing the closeness between both boundary-spanning leaders (Crant, 2000).

According above analysis, when Partner A interprets motivation of Partner B to expressed humility as performance improvement. Partner A tends to view partner B as achievement-focused and expects to achieve high standards of performance when expressing humility (Ashford et al., 2003; Crant, 2000). Partner A tends to appreciate the performance-centered work of Partner B (Day & Crain, 1992), and they are likely to reciprocate by providing support, which helps to obtain high quality knowledge sharing. Based on the above analysis, the following hypothesis is proposed:

***H2a:** Attributed-motive for performance improvement moderates the direct effect of expressed humility on knowledge sharing among boundary-spanning leaders such that the effect of expressed humility on knowledge sharing is stronger when the attributed-motive for performance improvement is higher rather than lower.*

Knowledge sharing among boundary spanners help deepen the connection between individuals (Huang et al., 2016), thus further increase the connection between the two sides of organizations (according to SET). When knowledge sharing is at a high level, it is conducive to the establishment of cooperative relations between the two sides of the enterprise. When knowledge sharing is at a low level, it will affect mutual relationship. This study also aims to analyze Partner A attributed-motive for performance improvement, which could produce different information processing effects (positive effects) and thus have different impacts on the relationship between the two sides of the enterprise. In other words, when a leader expresses humility is attributed to performance improvement, whose behavior is understood to be true, in order to better promote the cooperation between both sides. The other leader is more willing to lead the team to adopt positive information processing behavior, thus further promoting the relationship between both organizations. Based on the above analysis, the following hypothesis is proposed:

***H2b:** The indirect effect of expressed humility on inter-organizational cooperation commitment, via knowledge sharing, is moderated by Partner A's attributed-motive for performance improvement such that the indirect effect is stronger when Partner A attributed-motive for performance improvement is high, but weakens when Partner A attributed-motive performance improvement is low.*

(b) Attributed-motive for Impression Management

Attributed-motive for impression management refers to the fact that boundary-spanners believe that leaders create a better social image and leadership reputation by expressing humility (Westphal et al., 2016). Where a boundary-spanner interprets expressed humility as driven by impression management motives or as a tactic used by Partner A to enhance their personal images, things are different. Researchers have found that those who attempt to impress others are likely to succeed and received what they want from them (Kipnis & Schmidt, 1988; Wayne & Ferris, 1990; Wayne & Kacmar, 1991). Fodor (1973) supported this view, finding that subordinate who attempted to impress their supervisors received no greater rewards than those who made no such attempt, because individuals usually form negative attitudes about others whom they have identified as having attempted to manipulate their impressions.

Based on above, Crant (1996) points out that boundary-spanning leader engaged in impression management may be considered to be unreal, unreliable and planned. Their expressed humility can also be seen as manipulative and aimed at obtaining rewards (Crant, 2000). If Partner A attributed expressed humility of Partner B to impression management, such behavior is less likely to generate positive impressions (Morrison & Bies, 1991). As a result, Partner A tend to offer less support to Partner B, and the act

of expressed humility is less likely to be associated with high quality knowledge sharing.

Based on the above analysis, the following hypothesis is proposed:

H3a: Attributed-motive for impression management moderates the direct effect of expressed humility on knowledge sharing among boundary-spanning leaders such that the effect of expressed humility on knowledge sharing is weaker when the attributed-motive for impression management is higher rather than lower.

Similarly, this study suggests that Partner A attributed impression management motives can also moderate the mediating effect of knowledge sharing. When Partner B expresses humility attributed impression management, Partner A understands it as a superficial phenomenon, so his expressed humility is considered hypocritical. Therefore, leaders are more willing to lead the team to adopt negative information processing behavior, which is not conducive to the development of inter-organizational relation between the two sides. Therefore, this study posits that how Partner A interpret the motives driving the expressed humility of Partner B plays an important role in determining whether such behavior is associated with high quality knowledge sharing.

Hence, this study further proposes the following research hypotheses:

H3b: The indirect effect of expressed humility on inter-organizational cooperation commitment, via knowledge sharing, is moderated by Partner A's attributed-motive for impression management such that the indirect

effect is stronger when Partner A attributed-motive for impression management is low, but weakens when Partner A attributed-motive for impression management is high.

Based on the above analysis, the theoretical model is shown as Figure 3-1.

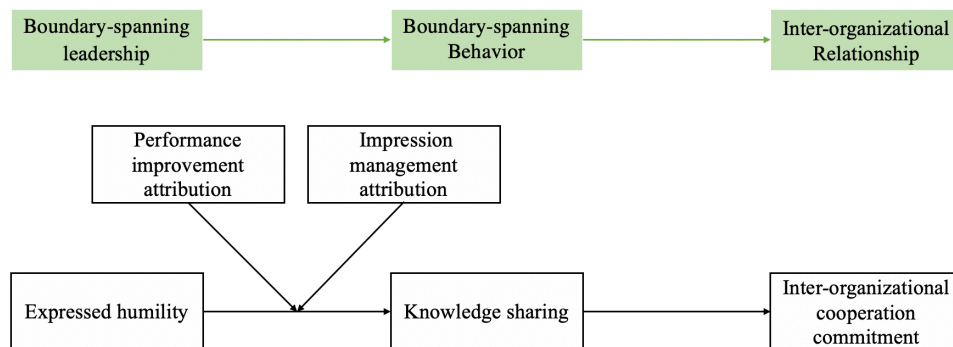


Figure 3-1 Hypothesized Model

Chapter 4 Method

In this chapter, I introduce the design, the sample, the survey instruments, and the analytic strategy that I used to test my research model.

4.1 Participants and Procedure

The survey data was collected through a custom web application designed in oTree (Chen et al., 2016). The sample pool includes some EMBA and DBA students at Shanghai Jiao Tong University, as well as qualified respondents from a third-party data collection company. The participants from two sub-pools access to the same customized-web application separately at two time periods. Students from SJTU EMBA and DBA programmes do the pilot test first, then the questionnaires are randomly distributed to the second sample sub-pool via a third-party data collection company. Team leaders and his/her member are paired and fill out the survey questionnaires at two time periods, team leaders first, and then their members. A descriptive analysis is used to examine the variance of these two sub-pools.

The cell phone numbers of team leaders for the survey respondents are collected to use as unique identifiers for each leader-member pair. A web link is distributed to the team leader first, who then uses their registered cell phone number to participate. After he/she has finished his/her part of the survey, he/she then send his/her link to the member, who uses the same phone number to continue the second part of the survey

after a required period of delay. The web-based application is designed such that respondents themselves cannot decide when to proceed to the next stage of the survey.

This study sets one attention check in each of the two questionnaires. Attention checks are a common method researchers use to catch unmotivated respondents who may harm data quality by not reading questions carefully, speeding through surveys, skipping questions, answering randomly, or providing nonsense responses to open-ended questions. This study received complete data from 286 leader-member pair constituting the final sample of this study. After excluding participants who did not pass the attention check, this study finally collected 248 pairs of valid data.

4.2 Measure

Partner A rates expressed humility of Partner B (the independent variable), attributed performance improvement motives, and attributed impression management motives (the moderators), and the quality of inter-organizational cooperation commitment (the dependent variable). A designated employee from team A rates knowledge sharing (the mediator).

We use questionnaires in English from previous literature. The English version is translated into Chinese and then back translated into English, with recognition of the cross-cultural distinctions in the connotation of the equivalent constructs. The back-

translated English version is then checked against the original English version and a number of questions are reworded to improve the accuracy of the translation. All measuring tools are well-developed and validated scales (we use 5-point scales for all relevant questions, with 1-5 indicating the degree of consistency, in which 5 denotes the highest degree of non-consistency while 1 denotes non-consistency). A summary of all instruments used in this research can be found in the Appendix I and II.

Expressed Humility of Boundary-spanning Leaders

In this study, the concept of expressing humility comes from Owens & Hekman (2012), and a 9-item scale is used to test the expressed humility of team leader of Partner B. An example item is “The leader of Partner B is willing to learn from others.”, and the Cronbach’s α for this measure is .76.

Attributed Motives of Expressed Humility

Stobbeleir et al (2010) conduct a survey on 1,781 MBA students who were enrolled or graduated from a university in the southwest U.S. where 319 students answered with an effective response rate of 18%. The results show that the internal consistency coefficients of two dimensions of the motivational attribution scale for managers' feedback-seeking behaviors are 0.77 and 0.91, respectively. The leaders' attributed motives for proactive behavior included two subscales, namely, attributed-motive for performance improvement and attributed-motive for impression management, with a

total of 14 questions. Similarly, to assess partners perceived attributed-motive for performance improvement, we adapt a 6-item scale ($\alpha = .86$) developed by Stobbeleir et al (2010). An example item is “A desire to strengthen your working relationship.” To assess partners perceived attributed-motive for impression management, we adapt an 8-item scale ($\alpha = .92$) developed by Stobbeleir et al (2010). An example item is “A desire to capture your attention on him.”

Knowledge Sharing

Griffith et al (2001) use the matching survey data of manufacturer (supplier) and distributor (buyer) for this construct. Knowledge sharing is part of information processing behaviors. Knowledge sharing denotes a timely two-way conveyance of knowledge, including knowledge about products, competitive forces, markets, and competitors. Four items are extracted from Mohr and Spekman (1994). The internal consistency coefficient of the knowledge sharing part is 0.86, and the factor load was > 0.7 . Thus, to assess knowledge sharing, we adapted a 4-item scale developed by Mohr and Spekman (1994). An example item is “Our team/organization have provided a great deal of knowledge about competitive advantages to Partner B.”, and the Cronbach’s α for this measure is .86.

Inter-organizational Cooperation Commitment

Following the relationship literature, we adapt a 5-item to assess inter-organizational cooperation commitment based on measures initially developed by Anderson and Weitz (1992). An example item is “Our team have a strong sense of loyalty to Partner B, so we continue to work with them.”, and the Cronbach’s α for this measure is .91.

Control Variables

Demographic variables are factor for the cognitive differences. Thus, this study controls demographic variables such as leader general characteristic, age (1=male, 0=female), gender, education (1=under college, 2=college, 3=bachelor, 4=postgraduate and above), tenure in current company, and working time as a team leader.

Generally speaking, compared with small project amount, large ones have more incentives and advantages to build high-quality inter-organizational cooperation commitment (Droge et al., 2003). Therefore, in this study, projects’ monetary value is taken as a control variable to avoid influencing the effect of spanning-boundary leader expressed humility on inter-organizational cooperation commitment.

In China, the concept of *guanxi*, which translates to personal relationships or connections, plays a critical role in business and inter-organizational cooperation. The duration and quality of these relationships can have a significant impact on the level of

commitment and cooperation between organizations. Research has shown that the longer the duration of a relationship between two organizations, the higher the level of trust and commitment between them (Yan & Gray, 2001). Moreover, long-standing relationships can help organizations to develop a better understanding of each other's capabilities, strengths, and weaknesses, and thus enable them to work more effectively together (Luo, 2002). In addition to the duration of relationships, the quality of personal relationships between individuals also plays a vital role in inter-organizational cooperation. Personal relationships are seen as a way of building trust and reducing uncertainty between organizations (Yan & Gray, 2001). In China, relationships are often built through the exchange of favors, gifts, and socializing, which can help to establish a sense of mutual obligation and trust between individuals (Chen & Chen, 2004). Overall, organizations that prioritize building and maintaining strong relationships with their partners are likely to enjoy a higher level of commitment and cooperation, which can ultimately lead to greater success and competitive advantage.

Inter-organizational cooperation is an important aspect of business relationships that can influence the success of a partnership. Perceived cooperation satisfaction and perceived cooperation success are two factors that can impact the level of commitment that organizations have towards inter-organizational cooperation. Perceived cooperation satisfaction refers to the extent to which partners in a cooperative relationship are satisfied with the degree of cooperation that exists between them. When

partners perceive that cooperation is satisfactory, they are more likely to be committed to the partnership and to work towards achieving common goals. Perceived cooperation success, on the other hand, refers to the extent to which partners believe that cooperation has been successful in achieving shared goals and objectives. When partners perceive that cooperation has been successful, they are more likely to be committed to continuing the partnership and to work towards achieving future goals. The relationship between perceived cooperation satisfaction and perceived cooperation success and inter-organizational cooperation commitment has been explored in several studies. For example, a study by Kwon and Suh (2004) found that perceived cooperation satisfaction was positively related to commitment to inter-organizational cooperation. Similarly, a study by Chen and Wu (2011) found that perceived cooperation success was positively related to commitment to inter-organizational cooperation. Overall, perceived cooperation satisfaction and perceived cooperation success can play an important role in influencing the level of commitment that organizations have towards inter-organizational cooperation. When partners perceive that cooperation is satisfactory and successful, they are more likely to be committed to the partnership and to work towards achieving common goals.

From what has been discussed above, in this study, factors at the individual level (age, gender, education level, working time in current organizations and tenure as a team leader) and factors at the organizational level (cooperation project amount, relationship

duration with partner, interpersonal close relationship, perceived cooperation satisfaction and perceived cooperation success) are controlled to ensure the main effect.

4.3 Analysis Strategy

This study mainly used SPSS and Mplus software to analyse the data. This chapter presents the results from the preliminary analyses, hypothesis testing, and path analysis used to test the hypothesized model. To demonstrate the robustness of the results, this study also presents the supplementary analyses to test the unstandardized coefficient estimates for the model.

First, confirmatory factor analysis needs be divided into the combination analysis of factors according to the correlation between variables to see whether the factors can be effectively differentiated. By confirmatory factor analysis, the validity of each variable is determined. It is expected that the model fit of the five-factor model is better than another alternative model and can capture distinct constructs via model comparison results.

Second, this study tested the conceptual model through path analysis using Mplus, which is capable of examining multiple mediated and moderated relationships simultaneously. Indirect effects were further tested by performing Monte Carlo simulations to calculate 95% confidence intervals (CI) with 20,000 resamples. An

indirect effect is considered significant when the 95% CI excludes zero (Preacher & Selig, 2012). All hypothesis tests were reported as one-tailed tests.

Third, this study by examining the interactive effect of expressed humility and partner A attributed motives on knowledge sharing to test H2a and H3a. The attributed motives for partner B expressed humility is made up of two aspects: performance improvement and impression management. Under the Partner A attributed performance improvement, the effect of expressed humility on knowledge sharing is positive. On the contrary, under the partner A attributed performance improvement, the effect of expressed humility on knowledge sharing is negative. In addition, the study thinks the moderate effect is different for high-level moderation and low-level moderation. This study uses the mean moderation plus a standard deviation represent the high-level moderation, and the mean of moderation minus a standard deviation represent the high-level moderation. Also, this study use worksheet plots of two-way interaction effects for unstandardized variables.

In addition, this study needs test moderation mediated effect between partner B expressed humility and inter-organizational cooperation commitment (that is H2b and H3b). In step 1, this study needs to test that Partner A attributed performance improvement motive is positively associated with knowledge sharing, whereas Partner A attributed impression management motive is positively associated with knowledge

sharing. In step 2, this study needs to test the interaction term the model explained significantly more variance and that the interaction term is significantly. This study utilized the methods of Hayes (2013) to test H3b and H3b in an integrative fashion at one standard deviation above and below the mean of attributed motive. When Partner A attributed performance improvement motive is low, the mediated model should not differ significantly. When Partner A's attributed impression management motive is high, the mediated model should not differ significantly. For clarity, this study will present all results in a path model.

Chapter 5 Results

In this chapter, I present the results from (a) the preliminary analyses, including analysis of variance, descriptive statistics and confirmatory factor analysis; (b) hypothesis testing; and (c) supplementary analyses to test the unstandardized coefficient estimates for the model, and (d) demonstrate the robustness of the results.

5.1 Preliminary Analysis

Analysis of Variance

Analysis of variance (ANOVA) is a statistical technique used to determine whether there are significant differences between the means of two or more groups. It is a powerful tool for comparing the effects of different levels of an independent variable on a dependent variable. ANOVA is particularly useful when there are multiple groups or treatments being compared, and it allows researchers to test for overall differences between groups while controlling for the effects of other variables. Overall, ANOVA is an essential tool for researchers seeking to understand the relationships between variables and identify the factors that contribute to differences in their data.

First, a test for the homogeneity of variance assumption was conducted prior to an independent samples t-test to examine the effect of gender on inter-organizational cooperation commitment. The Levene's test was used to assess whether the variances of the two groups were equal.

The sample consisted of 248 participants, with 50 in the female group and 198 in the male group. The inter-organizational cooperation commitment was measured on a continuous scale, and higher scores indicated better outcomes. The independent samples t-test revealed a significant difference in outcome scores between the female group ($M = 3.96$, $SD = .74$) and the male group ($M = 3.84$, $SD = .80$). The results of the Levene's test indicated that the assumption of homogeneity of variance was met, $F(248) = .93$, $p = .35$. Therefore, the independent samples t-test was appropriate for analyzing the data. These findings suggest that gender does not have a significant impact on inter-organizational cooperation commitment in this sample.

Moreover, this study conducted a test for the homogeneity of variance assumption for an independent samples t-test to examine the effect of a close relationship between two partners on inter-organizational cooperation commitment. The sample consisted of 248 participants, with 38 in the non-close relationship group and 210 in the close relationship group. The Levene's test was used to assess whether the variances of the two groups were equal. The independent samples t-test revealed a significant difference in outcome scores between the non-close relationship group ($M = 3.67$, $SD = 0.42$) and the close relationship group ($M = 3.91$, $SD = 0.83$). The results of Levene's test indicated that the assumption of homogeneity of variance was met, $F(248) = 1.74$, $p = 0.08$. Therefore, the independent samples t-test was appropriate for analyzing the data.

These findings suggest that a close relationship does not have a significant impact on inter-organizational cooperation commitment in this sample.

Second, a one-way ANOVA was conducted to examine the effect of age on outcome variable. Prior to conducting the ANOVA, a test for the homogeneity of variance assumption was performed using Levene's test. The results of the test indicated that the assumption of homogeneity of variance was met, $F(27, 217) = 1.97, p = .14$. Therefore, the one-way ANOVA was appropriate for analyzing the data. The result of the F-test showed that $F = 1.68, p = 0.02$, indicating that there is a significant difference in the means of multiple age groups. Thus, it is necessary to control for age when conducting hypothesis testing.

This study also conducted a one-way ANOVA to examine the effect of education on the outcome variable. The results of the test indicated that the assumption of homogeneity of variance was met, $F(2, 245) = 1.19, p = .31$. Therefore, the one-way ANOVA was appropriate for analyzing the data. The independent samples F-test revealed a significant difference in outcome scores between the undergraduate degree group ($M = 3.80, SD = 0.42$), the graduate degree group ($M = 3.69, SD = 0.90$), and the master's degree group ($M = 3.95, SD = 0.74$). The results of Levene's test indicated that the assumption of homogeneity of variance was met, $F(248) = 2.73, p = .07$. Thus, these findings suggest that education had an insignificant effect on the outcome variable.

Furthermore, a one-way ANOVA was conducted to examine the effect of the amount of cooperation project on the outcome variable. The results showed that the p-value for the test of homogeneity of variance was $F(4, 243) = 3.73$ ($p = .01$), which is less than 0.05, indicating non-homogeneity of variance. Therefore, the F-test could not be used. A Welch's test, which is an alternative to the F-test in case of heteroscedasticity, was conducted in this study. However, since homogeneity of variance was confirmed, the Welch's test was not used. Nonetheless, the result of the Welch's test showed a p-value of 0.01, indicating a statistically significant difference among multiple groups. Thus, it is necessary to control for the amount of cooperation project when testing the hypothesis.

Lastly, this study conducted a one-way ANOVA to examine the effect of satisfaction and successful cooperation experiences on the outcome variable. The results showed that the p-values for the tests of homogeneity of variance were $F(3, 244) = 10.86$ ($p < .01$) and $F(3, 244) = 7.37$ ($p < .01$), respectively, indicating non-homogeneity of variance. Therefore, the F-test could not be used. However, the results of the Welch's test demonstrated a p-value of less than 0.01, indicating a statistically significant difference among the multiple groups of satisfied experiences or successful cooperation experiences. Thus, it is necessary to control for satisfied experiences or successful cooperation experiences when conducting hypothesis testing.

Descriptive Statistics

I obtain the sample data of 248 from both cooperation partner. Table 5-1 presents the means, standard deviations, and zero-order correlations among all study variables. I found that among the participants, approximately 80% were male (shown in Figure 5-1), and 95.1% had a bachelor's degree or higher (shown in Figure 5-2). They had an average age of 44.18 years (SD = 0.40), an average tenure of 64.91 months (SD = 66.24) in the current organization, average leader tenure of 86.49 months (SD = 88.87), and an average number of cooperation duration of 22.48 months (SD = 26.39).

Table 5-1 Means, Standard Deviations, Reliabilities, and Correlations Among Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1. Gender	.80	.40	—														
2. Age	44.18	6.44	.26***	—													
3. Education	2.62	.58	.18**	.10	—												
4. Organizational tenure	64.90	66.24	.20**	.23***	-.09	—											
5. Work tenure as a leader	86.49	88.87	.24***	.44***	-.06	.45***	—										
6. Relationship duration with partner	22.48	26.39	.02	.09	.04	.38**	.09	—									
7. Close relationship with partner	.85	.36	.18**	.03	.23***	-.49***	-.20**	-.02	—								
8. The amount of cooperation project	3.29	1.37	-.07	.06	.12	-.25***	-.38***	.33***	.35***	—							
9. The overall cooperation experience	3.69	.64	.06	.17**	.02	-.08	.08	.25***	.18**	.27***	—						
10. The cooperation experience	3.94	.89	.06	.19**	.19**	-.06	.23***	.09***	.09	.11***	.75***	—					
11. Expressed humility	3.82	.48	-.01	-.11	<.01	.13*	-.02	.14*	.01*	.13*	.46***	.28***	(.76)				
12. Knowledge sharing	3.83	.85	-.05	.25***	-.12	-.17**	.23***	.10*	.14*	.30***	.13*	.13*	.17**	(.86)			
13. Inter-organizational cooperation commitment	3.87	.79	-.06	.06	.13*	-.09	.26***	.26***	.11	.08	.51***	.52***	.38***	.54***	(.91)		
14. Performance improvement attribution	4.10	.60	<.01	.10	.07	.19**	.25***	.14*	-.26***	-.08	.35***	.35***	.63***	.10	.43***	(.86)	
15. Impression management attribution	3.87	.74	-.01	-.01	.17**	.01	.04	.16*	-.06	.13*	.02	-.01	.40***	.26***	.27***	.62***	(.92)

Note. $N = 248$. * $p < .5$, ** $p < .01$, *** $p < .001$; $SD =$ standard deviation; $M =$ mean; reliability coefficients are reported along the diagonal.

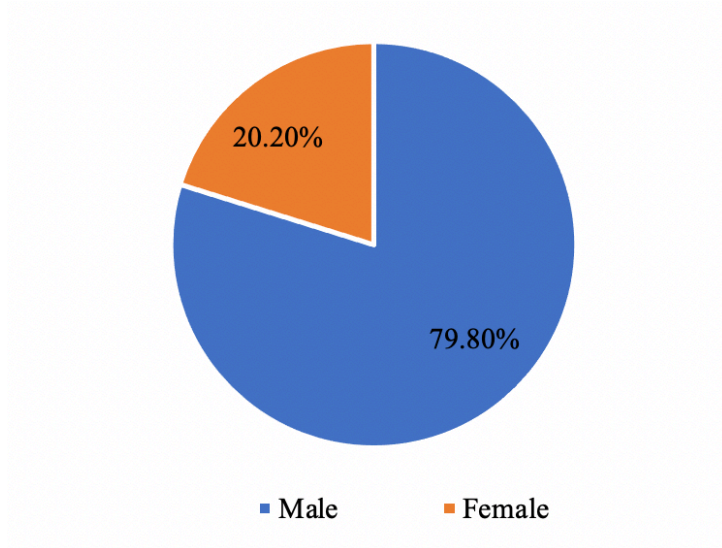


Figure 5-1 Proportion and Distribution of Gender

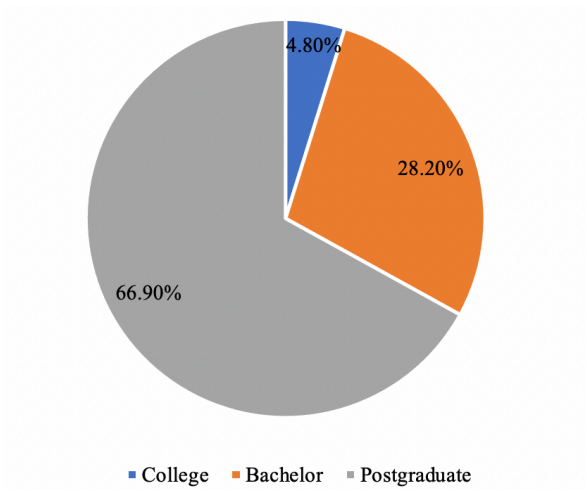


Figure 5-2 Proportion and Distribution of Education

In addition, I found that 84.70% Partner B had a close relationship with Partner A (shown in Figure 5-3), 97.6% cooperation project had above 0.5 million amount (shown in Figure 5-4), 65% partners had very satisfied or more satisfied for the cooperation experience (shown in Figure 5-5), 71.70% partner perceived a successful or more successful cooperation experience (shown in Figure 5-6).

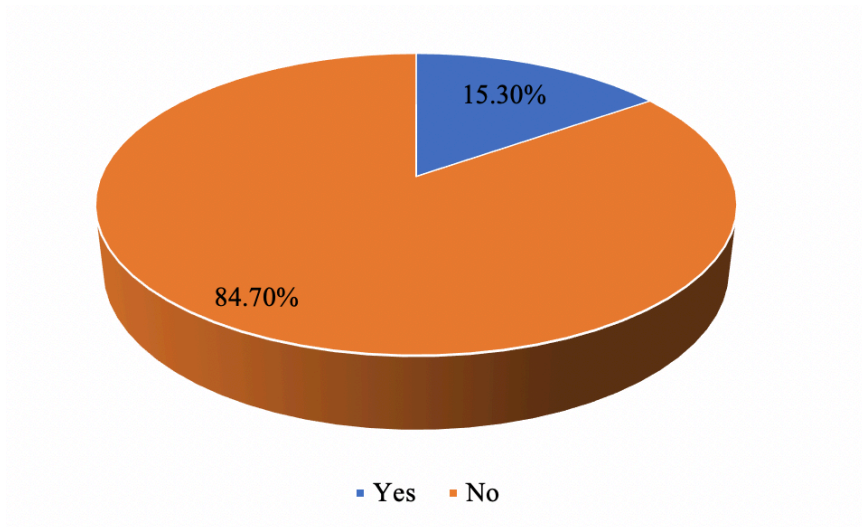


Figure 5-3 Proportion and Distribution of Close Relationship

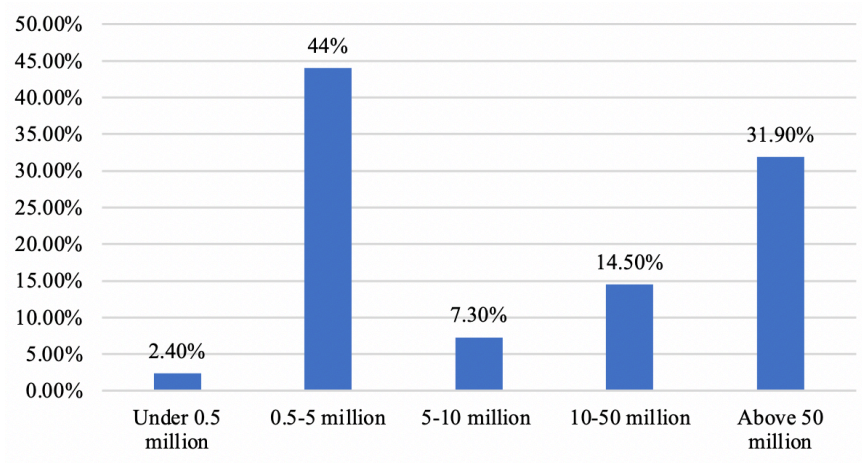


Figure 5-4 Proportion and Distribution of Amount of Cooperation Project

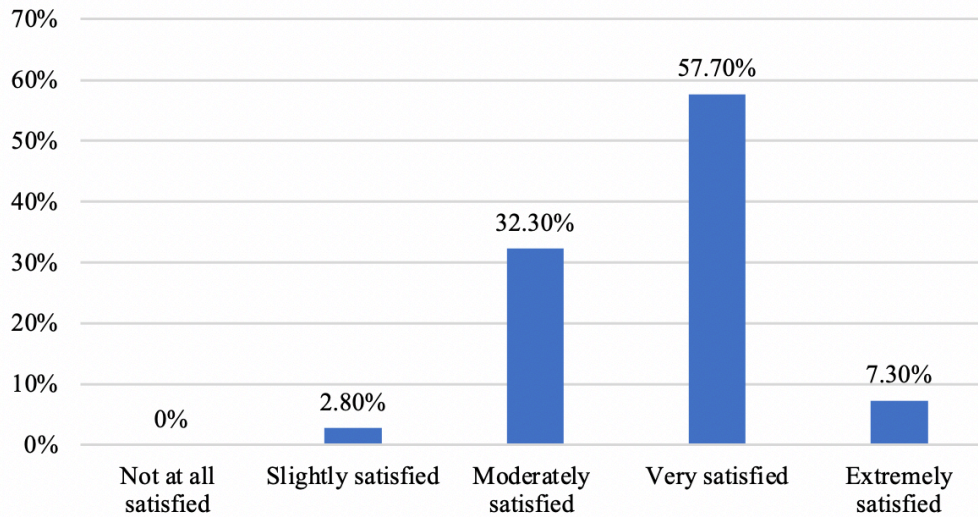


Figure 5-5 Proportion and Distribution of Overall Cooperation Experience Satisfied

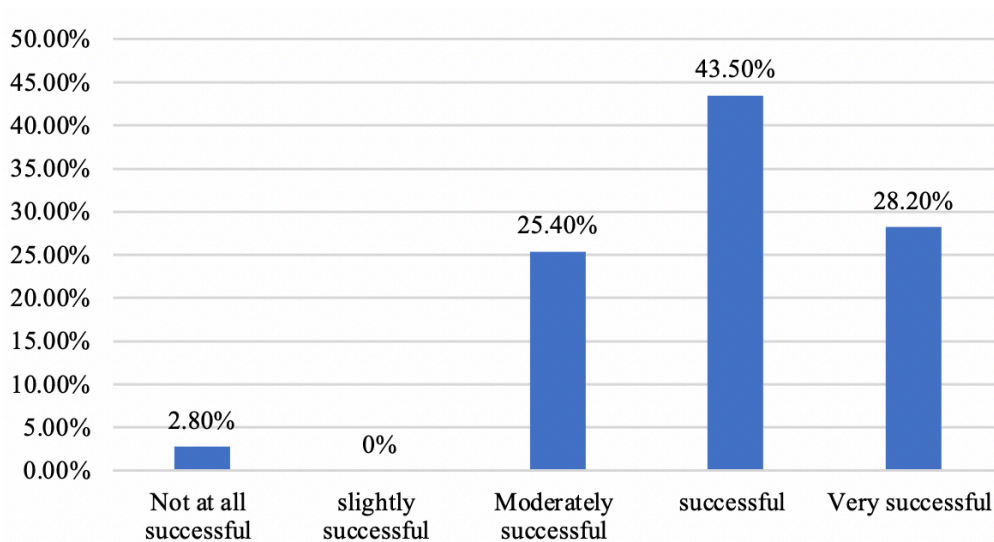


Figure 5-6 Proportion and Distribution of Perceived Successful of Cooperation Experience

Correlation Analysis

According to Table 5-1, correlations among the study variables are generally consistent with prior research with respect to their direction and magnitude. For example, expressed humility of boundary-spanning leaders was moderately and positively related to followers' helping behavior ($b = .14, p < .05$). Helping behavior was weakly and

positively related to partner knowledge sharing ($b = .23, p < .01$). Moreover, partner knowledge sharing was moderately and positively related to inter-organizational cooperation commitment ($b = .46, p < .01$), supporting the notion that they are related but distinct constructs.

Confirmatory Factor Analysis

We conducted confirmatory factor analyses (CFAs) to examine the distinctiveness of all variables. To achieve an optimal ratio of sample size to number of estimated parameters, we followed previous research (e.g., Cattell & Burdsal, 1975; Chin, 1998; Sass & Smith, 2006) and randomly combined the scale items into parcels for each variable. Each variable had three parcels as indicators. In general, a scale must have at least three items to be considered a valid and reliable measure of a construct. Therefore, when it comes to knowledge sharing, it does not need to be packaged into four items for measurement. Doing so may result in fewer than three items being shared, which would not provide a comprehensive assessment of the knowledge being shared. The hypothesized five-factor model with distinct but correlated factors for the four variables was compared with a series of alternative models (shown in Table 5-2).

The five-factor baseline model (Model 1) reveals the superior fit and good discriminative validity of the main variables in this study ($\chi^2[94, N = 248] = 1720.40$, root mean square error of approximation (RMSEA) = .07, comparative fit index (CFI)

= .90, Tucker–Lewis index (TLI) = .90, standardized root means square residual (SRMR) = .08, supporting the discriminant validity of the constructs measured.

Model 1 fits the data better than Model 2 (four-factor model), in which performance improvement attribution and impression management attribution were combined into one factor ($\chi^2[98, N = 248] = 1873.86$, RMSEA = .27, CFI = .54, TLI = .44, SRMR = .16), which fit significantly worse than the model 1 did, $\Delta\chi^2[4, N = 248] = 153.46, p < .01$.

Model 1 also fits the data better than Model 3 (two-factor model), in which expressed humility, performance improvement attribution and impression management attribution were combined into one factor, knowledge sharing and inter-organizational cooperation commitment were combined into another factor ($\chi^2[104, N = 248] = 2162.05$, RMSEA = .28, CFI = .47, TLI = .39, SRMR = .19), also worse than the Model 1, $\Delta\chi^2[10, N = 248] = 441.65, p < .01$.

We also tested a one-factor model (Model 4), in which all items are loading on one factor ($\chi^2[105, N = 248] = 2692.46$, RMSEA = .31, CFI = .34, TLI = .24, SRMR = .22), also worse than the Model 1, $\Delta\chi^2[11, N = 248] = 972.06, p < .01$. These results indicate that supporting the discriminant validity of the measures and indicating that the measures do indeed capture distinctive constructs.

Table 5-2 Confirmatory Factor Analyses

	Chi-Square / df	RMSEA	CFI	TLI	SRMR
Model 1 (Base-line model)	1720.40 / 94	.07	.90	.90	.08
Model 2 (four-factor)	1873.86 / 98	.27	.54	.44	.16
Model 3 (two-factor)	2162.05 / 104	.28	.47	.39	.19
Model 4 (One-factor)	2692.46 / 105	.31	.34	.24	.22

Note. $N = 248$. Model 2 is a four-factor model, in which performance improvement attribution and impression management attribution were combined into one factor; Model 3 is a two-factor model, in which expressed humility, performance improvement attribution and impression management attribution were combined into one factor, knowledge sharing, and inter-organizational cooperation commitment were combined into another factor; Model 4 is a one-factor model, in which all variables were combined into one factor.

5.2 Hypothesis Testing

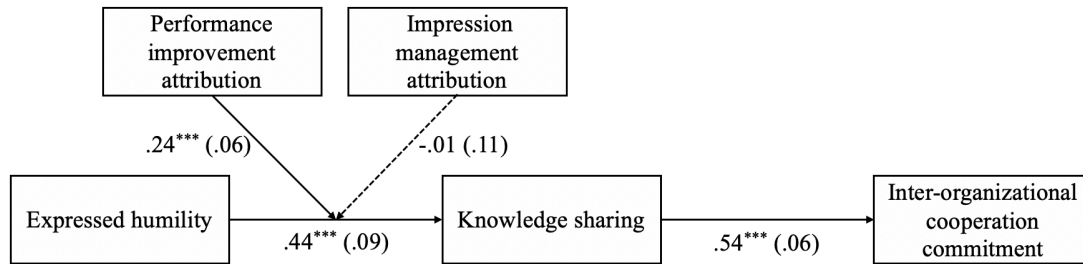
Direct Effects

Standardized coefficient estimates for the model are presented in Table 5-3 for Hypotheses 1 through 3. Figure 5-7 presents the path analysis results for our proposed model. The results indicate that expressed humility of boundary-spanning leaders had significantly positive relationship with the inter-organizational cooperation commitment ($b = .28$, $S.E. = .06$, $p < .01$). In a similar way, we found that the direct effect between expressed humility of boundary-spanning leaders and knowledge sharing has significantly positive relationship ($b = .32$, $S.E. = .07$, $p < .01$). Also, knowledge sharing has significantly positive relationship with the inter-organizational cooperation commitment ($b = .54$, $S.E. = .06$, $p < .01$).

Table 5-3 Standardized Coefficients of the Model

Variable	Inter-organizational cooperation commitment		Inter-organizational cooperation commitment		Knowledge sharing		Knowledge sharing	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Intercept	<.01	.05	<.01	.04	-.15**	.05	.61***	.07
Gender	-.10*	.05	-.07	.04	-.02	.05	-.03	.05
Age	-.04*	.06	-.16**	.05	.27***	.06	.29***	.06
Education	.09	.05	.20***	.04	-.23***	.05	-.26***	.05
Organizational tenure	-.37***	.07	-.11	.06	-.58***	.07	-.54***	.07
Work tenure as a leader	.36***	.06	.10	.05	.50***	.07	.47***	.07
Relationship duration with partner	.31***	.06	.23***	.04	.21***	.06	.18**	.06
Close relationship with partner	-.01	.06	.01	.05	-.12	.06	-.12	.06
The amount of cooperation project	-.08	.06	-.28***	.05	.21**	.07	.16*	.07
The overall cooperation experience	.11	.08	.28*	.09	-.31***	.09	-.25**	.09
The cooperation experience	.23**	.08	.18*	.08	.14	.08	.19*	.08
Expressed humility	.28***	.06	.11	.08	.45***	.07	.44***	.07
Knowledge sharing			.54***	.06				
Inter-organizational cooperation commitment								
Performance improvement attribution					-.06	.07	-.25**	.08
Impression management attribution							.28***	.07
Expressed humility* Performance improvement attribution					.23***	.05	.24***	.06
Expressed humility* Impression management attribution							-.01	.07
<i>R</i> ²	.50***	.05	.67***	.05	.48***	.05	.52***	.05

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Standardized regression coefficients are reported.



Note. $N = 248$. The Standardized path estimates are reported. Controlling for gender, age, education, organizational tenure, work tenure as a leader, relationship duration with partner, close relationship with partner, the amount of cooperation project, the overall cooperation experience. the cooperation experience. Stand error reported in the segment. Solid lines are statistically significant, whereas dashed lines are not. * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 5-7 Standardized Path Estimates for the Hypothesized Model (Standardized Estimates)

Indirect Effects

Hypothesis 1 predicted that knowledge sharing would mediate the relationship between expressed humility and inter-organizational cooperation commitment. As Table 5-4 shows, the indirect effect between expressed humility and inter-organizational cooperation commitment is significant in the directions as we expected. Using the Monte Carlo simulation with 20,000 replications to construct 95% confidence intervals for the indirect effects, we found that the indirect effect between expressed humility and inter-organizational cooperation commitment via knowledge sharing was .17 (95% CI = [.09, .26]). Because the confidence interval excluded the zero value, providing support for Hypothesis 1. Thus, knowledge sharing would mediate the relationship between expressed humility and inter-organizational cooperation commitment.

Table 5-4 Summary of Indirect Effects of the Model

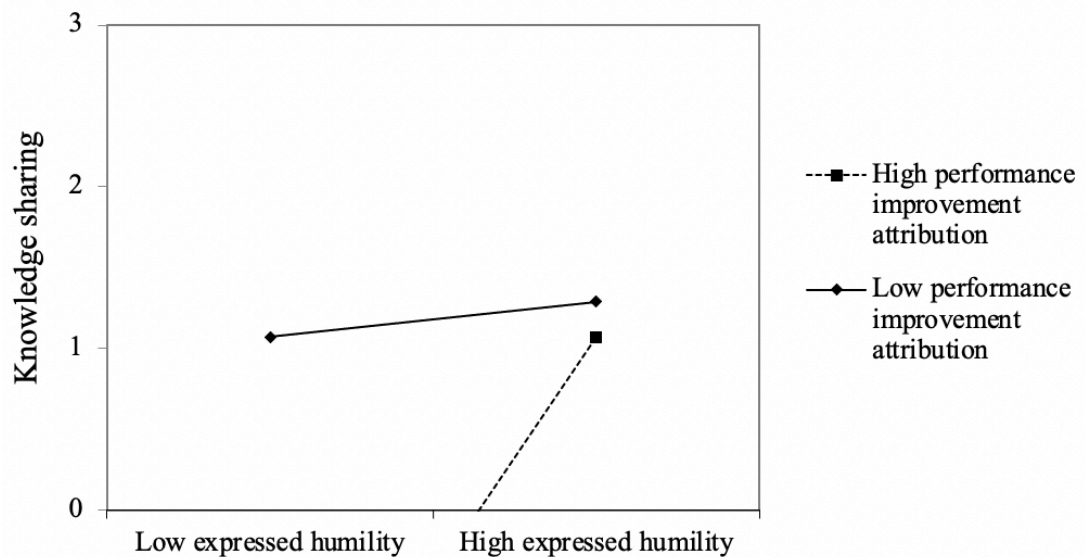
Indirect effects	Estimate	95% confidence intervals
The indirect of expressed humility on Inter-organizational cooperation commitment	.17	[.09, .26]
High-level performance improvement attribution	.22	[.11, .33]
Low-level performance improvement attribution	-.02	[-.13, .08]
Difference between high or low-level of performance improvement attribution	.24	[.07, .18]

Note. All estimates were tested for significance using used a Monte Carlo simulation with 20,000 replications to construct 95% confidence intervals for the indirect effects.

Moderated Effects of performance improvement attribution motive

I conducted simple slope tests to gain more insight in this moderating effect, and the results are summarized in Table 5-3. After controlling for the main effect of expressed humility of boundary-spanning leaders on knowledge sharing ($b = .45$, $S.E. = .07$, $p < .01$), the interaction effect of expressed humility and attributed-motive for performance improvement ($b = .23$, $S.E. = .05$, $p < .01$) was significant. Following Cohen, Cohen, West, and Aiken's (2003) recommendations, we plotted this interaction effect to better interpret the interaction patterns. As presented in Figure 5-8, when attributed-motive for performance improvement was high ($b = .69$, $S.E. = .09$, $p < .01$), expressed humility of boundary-spanning leaders had a stronger relationship with knowledge sharing than it did when attributed-motive for performance improvement was low ($b = .22$, $S.E. = .08$, $p < .01$). This indicates that the effect of expressed humility of boundary-spanning leaders on knowledge sharing was greater when partners perceived strong attributed-motive for performance improvement than when they

perceived weaker attributed-motive for performance improvement, providing support for supporting Hypothesis 2a.



Note: $N = 248$; High = $M+1$ SD. Low = $M-1$ SD.

Figure 5-8 The Moderating Effect of Performance Improvement Attribution on the Relationship between Expressed Humility and Knowledge Sharing

As shown in Table 5-3, the indirect relationship between expressed humility and inter-organizational cooperation commitment via knowledge sharing at high-level (one standard deviation above the mean) and low-level (one standard deviation below the mean) of partners perceived attributed motive for performance improvement. As shown in Table 5-4, The indirect was significant at 95% confidence intervals ($b = .22$, 95% CI = [.11, .33]) when partners perceived attributed motive for performance improvement was high, versus insignificant when partner performance improvement attribution was low ($b = -.02$, 95% CI = [-.13, .08]). The difference in partners perceived attributed

motive for performance improvement between high-level and low-level was significant ($b = .24$, 90% CI = [.15, .36]). Because the confidence interval excluded the zero value, the exacerbating effect of attributed motive for performance improvement on the direct relationships between expressed humility and inter-organizational cooperation commitment via knowledge sharing was significant. Thus, this result supported Hypothesis 2b.

Moderated Effects of impression management attribution motive

Hypothesis 3a proposed a negative moderating effect of attributed motive for impression management on the relationship between expressed humility and knowledge sharing among boundary-spanning leaders. However, after controlling for the main effect of expressed humility of boundary-spanning leaders ($b = .43$, S.E. = .07, $p < .01$) and the interaction effect of expressed humility and attributed motive for performance improvement ($b = .24$, S.E. = .06, $p < .01$) on knowledge sharing, the interaction effect of expressed humility and attributed motive for impression management ($b = .01$, S.E. = .09, $p > .05$) was found to be insignificant. Therefore, this study does not support Hypothesis 3a.

Similarly, the indirect relationship between expressed humility and inter-organizational cooperation commitment via knowledge sharing was significant with decrease in partners perceived attributed motive for impression management at a high-level (e.g.,

$b = .42$, 95% CI = [.24 .60]) and a low-level (e.g., $b = .45$, 95% CI = [.24 .65]). Thus, the difference in subordinates perceived performance subjectivity between high-level and low-level was insignificant (e.g., $b = -.02$, 95% CI = [-.29 .24]), failing to provide support for Hypothesis 3b.

While our logical expectations suggest that attributed-motive for impression management moderates the positive relationship between leadership humility and knowledge-sharing behaviors, the results of the present study do not support this conclusion. However, it is noteworthy that if Partner A perceives a humble leader in Partner B as genuinely interested in the team's well-being and fostering a collaborative environment, it significantly enhances their willingness to share knowledge. In such cases, attributed-motive for impression management become less influential, as individuals believe the leader's humility originates from authentic intentions.

Furthermore, it is important to acknowledge that the impact of attributed-motive for impression management on the relationship between partner leader humility and willingness to share knowledge can vary among individuals and contexts. Various factors, including the leader's credibility, the organizational culture, and specific circumstances, can influence this relationship.

Overall, the findings of the present study do not support the expected moderating effect of attributed-motive for impression management on the positive relationship between leadership humility and knowledge-sharing behaviors. However, the belief in a leader's genuine intentions can strengthen the willingness to share knowledge, even in the presence of impression management attributions. It is crucial to consider individual and contextual factors when examining this relationship.

Table 5-5 summarizes the results of the hypothesis testing.

Table 5-5 Summary of Results of Hypotheses Testing

Hypotheses	Results
Indirect effect	
Hypothesis 1: Knowledge sharing positively mediates the impact between expressed humility and inter-organizational cooperation commitment.	Supported
Moderating Effect	
Hypothesis 2a: If attributed-motive is for performance improvement, there is a strengthening moderating effect between expressed humility and knowledge sharing among boundary-spanning leaders.	Supported
Hypothesis 3a: If attributed-motive is for impression management, there is a negative moderating effect between expressed humility and knowledge sharing among boundary-spanning leader.	Not Supported
Moderated mediation Effect	
Hypothesis 2a: The indirect effect of humility on inter-organizational cooperation commitment, via knowledge sharing, is moderated by Partner A's attributed-motive for performance improvement such that the indirect effect is stronger when partner A attributed-motive for performance improvement is high, but weakens when partner A attributed-motive for performance improvement is low.	Supported
Hypothesis 3b: The indirect effect of humility on inter-organizational cooperation commitment, via knowledge sharing, is moderated by Partner A attributed-motive for impression management such that the indirect effect is stronger when partner A attributed-motive for impression management is low, but weakens when Partner A attributed-motive for impression management is high.	Not Supported

5.3 Supplementary Analysis

In this section, I present the results of three supplementary analyses, that is, unstandardized coefficient estimates for the model are presented in Table 5-6 for Hypotheses 1 through 3. The results indicate that expressed humility of boundary-spanning leaders had significantly positively relationship with the inter-organizational

cooperation commitment ($b = .46$, $S.E. = .09$, $p < .01$). I found that the indirect effect between expressed humility and inter-organizational cooperation commitment via knowledge sharing was $.28$ ($95\% \text{ CI} = [.15, .42]$). Because the confidence interval excluded the zero value, providing support for Hypothesis 1.

Additionally, I tested the mediating effect of inter-organizational cooperation commitment on the relationship between leadership humility and inter-organizational knowledge sharing. The results indicated that leadership humility had a significant positive effect on inter-organizational cooperation commitment ($b=0.28$, $p<.01$), which in turn had a significant positive effect on inter-organizational knowledge sharing ($b=0.62$, $p<.01$). That is, leadership humility has an indirect effect on inter-organizational knowledge sharing via inter-organizational cooperation commitment ($95\% \text{ CI} = [.08, .30]$). However, these results are contradictory to Hypothesis 1.

In my opinion, Hypothesis 1 is more consistent with the cross-boundary perspective of social embeddedness theory. This is because when leaders exhibit humility, it creates a sense of psychological safety and trust within the organization. This, in turn, can facilitate more effective knowledge sharing and ultimately increase inter-organizational cooperation commitment. We believe that in the context of inter-organizational relationships, personal behavior and interaction play a crucial role, and that boundary-spanning behavior mediates the relationship between the boundary-spanning

relationship and the exchange relationship, as explained from the boundary-spanning perspective.

Therefore, even though the data analysis showed that leadership humility indirectly affects knowledge sharing by influencing inter-organizational cooperation commitment, this logic does not appear to be consistent with the cross-boundary perspective of social embeddedness theory.

Table 5-6 Unstandardized Coefficients of the Model

Variable	Inter-organizational cooperation commitment		Inter-organizational cooperation commitment		Knowledge sharing		Knowledge sharing	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Intercept	.86*	.43	.01	.35	.38***	.03	.75	.50
Gender	-.20*	.10	-.14	.08	-.05	.11	-.06	.11
Age	-.01	.01	-.02**	.01	.04***	.01	.04***	.01
Education	.12	.07	.27***	.06	-.33***	.08	-.38***	.08
Organizational tenure	-.01***	<.01	-.01	<.01	-.01***	<.01	-.01***	<.01
Work tenure as a leader	<.01***	<.01	<.01	<.01	.01***	<.01	.01***	<.01
Relationship duration with partner	.01***	<.01	.01***	<.01	.01***	<.01	.01***	<.01
Close relationship with partner	-.03	.13	.02	.12	-.28	.15	-.29	.15
The amount of cooperation project	-.05	.03	-.16***	.03	.13**	.04	.10	.04
The overall cooperation experience	.13	.10	.35**	.11	-.41***	.11	-.33**	.12
The cooperation experience	.20**	.07	.16*	.07	.13	.08	.18*	.08
Expressed humility	.46***	.09	.18	.13	.80***	.13	.77***	.13
Knowledge sharing			.50***	.05				
Inter-organizational cooperation commitment							-.37**	.12
Performance improvement attribution					-.08	.10		
Impression management attribution							.32***	.08
Expressed humility* Performance improvement attribution					.69***	.14	.72***	.18
Expressed humility* Impression management attribution							-.03	.16
<i>R</i> ²	.50***	.05	.67***	.03	.48***	.05	.52	.05

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Unstandardized regression coefficients are reported.

After controlling for the main effect of expressed humility on knowledge sharing ($b = .80$, $S.E. = .13$, $p < .01$), the interaction effect of expressed humility and performance improvement attribution ($b = .69$, $S.E. = .14$, $p < .01$) was significant, providing support for Hypothesis 2a. Further, the indirect was significant at 95% confidence intervals ($b = .36$, 95% CI = [.18, .54]) when partners perceived performance improvement attribution was high, versus insignificant when partner perceived performance improvement attribution was low ($b = -.04$, 95% CI = [-.21, .13]). The indirect effect difference in performance improvement attribution between high-level and low-level was significant ($b = .40$, 90% CI = [.24, .59]), also providing support for Hypothesis 2b.

Similarly, after controlling for the main effect of expressed humility of boundary-spanning leaders ($b = .77$, $S.E. = .15$, $p < .01$) and the interaction effect of expressed humility and attributed-motive for performance improvement ($b = .72$, $S.E. = .18$, $p < .01$) on knowledge sharing, the interaction effect of expressed humility and attributed-motive for impression management ($b = -.03$, $S.E. = .25$, $p > .05$) was insignificant. As a result, Hypothesis 3a and 3b were not supported.

Chapter 6 Discussion

In this chapter, I discuss the major findings of this study, along with their theoretical and practical implications. Furthermore, I identify the limitations of this study and point out future research directions that may prove fruitful.

6.1 Conclusion

The study aimed to examine the relationship between spanning-boundary leader expressed humility, knowledge sharing, and inter-organizational cooperation commitment, and the moderating effects of performance improvement and impression management attributions. The study was conducted using a survey of boundary-spanning leaders from various organizations.

The results of the study revealed that boundary-spanning leaders' expressed humility had an indirect effect on inter-organizational cooperation commitment via knowledge sharing. Furthermore, the study found that the relationship between expressed humility and knowledge sharing among boundary-spanning leaders was strengthened when the leader's humility was attributed to performance improvement. However, when the leader's humility was attributed to impression management, expressed humility did not have a significant effect on the relationship between expressed humility and inter-organizational cooperation.

The study also found that the indirect effect of humility on inter-organizational cooperation commitment, via knowledge sharing, was moderated by partner performance improvement attribution. Specifically, the indirect effect was stronger when partner performance improvement motivation was high, but weakened when partner performance improvement motivation was low.

These findings provide insights into the importance of boundary- spanning leaders' humility in fostering knowledge sharing and inter-organizational cooperation commitment, as well as the conditions under which these relationships are most effective. The findings of this study have theoretical and practical implications for boundary-spanning leaders who are responsible for promoting inter-organizational cooperation.

Theoretical implications

Firstly, the study contributes to the literature on inter-organizational cooperation by identifying the role of boundary-spanning leaders' expressed humility in promoting cooperation commitment. This study adds to the growing body of literature that highlights the importance of soft skills such as humility, emotional intelligence, and empathy, in promoting successful inter-organizational cooperation (e.g., Leach et al., 2018; Chen et al., 2021). Expressed humility may play different roles in different cultural business environment. Hooker (2012) divides countries into relationship-based

cultures and rule-based cultures. In relationship-based cultures such as China, one's traits and characters are more highly emphasized due to their importance to establish relationships, while in rule-based cultures like America, one's professionalism and competence are more stressed. Therefore, it is reasonable to consider that humility, as a precious virtue, is more often utilized by Chinese leaders to gain cooperation opportunities than Western leaders.

Secondly, the study contributes to the literature on knowledge sharing by showing how expressed humility by boundary-spanning leaders can indirectly promote inter-organizational cooperation commitment through knowledge sharing. This finding is consistent with previous research that has shown the importance of knowledge sharing in facilitating successful inter-organizational cooperation (e.g., Yan and Tan, 2019).

Thirdly, the study adds to the literature on attribution theory by exploring the moderating role of attributed-motive for performance improvement on the relationship between expressed humility and knowledge sharing. The findings suggest that the relationship between expressed humility and knowledge sharing is stronger when boundary-spanning leaders are attributed-motive for performance improvement rather than that for impression management. This finding is consistent with previous research that has shown the importance of motivation in promoting knowledge sharing (e.g., Liang et al., 2014).

The results of our analyses did not support Hypotheses 3a and 3b. These findings can be attributed to the distinction between impression management and Partner A's perception of Partner B's humility as false. It is important to recognize that impression management attributions should not be automatically equated with viewing a leader's expression of humility as insincere.

In cases where Partner A perceives a humble leader in Partner B as genuinely interested in the team's well-being and fostering a collaborative environment, there is a significant enhancement in their willingness to share knowledge. In such instances, the influence of impression management attributions becomes less prominent, as individuals believe that the leader's humility originates from authentic intentions. Therefore, it is reasonable to conclude that the lack of support for Hypotheses 3a and 3b can be explained by the nuanced nature of impression management attributions and the positive impact of perceiving a humble leader B as genuinely interested in the benefit of two partner.

The theoretical implications of the study suggest that expressed humility among boundary-spanning leaders may foster inter-organizational cooperation commitment through knowledge sharing. The study also highlights the importance of attributional biases in moderating this relationship. These findings can contribute to the development

of theories related to leadership, inter-organizational relationships, and attributional biases.

Practical implications

The findings of this study have several practical implications for managers who aim to promote successful inter-organizational cooperation. Firstly, the study suggests that managers should prioritize the development of soft skills such as humility. This can be achieved through training programs, coaching, and mentoring.

Secondly, the study highlights the importance of promoting knowledge sharing among boundary-spanning leaders. Managers can facilitate knowledge sharing by providing resources such as information systems and databases, creating opportunities for networking and collaboration, and incentivizing knowledge sharing behaviors.

Finally, the study suggests that managers should pay attention to the performance improvement attribution of their partners. When partners are attributed with performance improvement motivation, managers should encourage boundary-spanning leaders to express humility, as this can lead to increased knowledge sharing and cooperation commitment. When partners are attributed with impression management motivation, managers should focus on other strategies for promoting cooperation commitment.

In summary, the study makes important theoretical contributions to the literature on inter-organizational cooperation, knowledge sharing, and attribution theory. It also provides practical implications for managers who aim to promote successful inter-organizational cooperation by developing the soft skills of their boundary-spanning leaders and promoting knowledge sharing.

6.2 Research Limitations

The paragraph describes the findings of a study examining the relationship between expressed humility among boundary-spanning leaders and inter-organizational cooperation commitment. While the study provides valuable insights into this relationship, there are some limitations to consider.

One limitation of the study is its sample size and representativeness. The study may have only examined a small sample of boundary-spanning leaders and organizations, which could limit the generalizability of the findings. Additionally, the study did not provide information on the characteristics of the organizations or the nature of the inter-organizational relationships, which could impact the results.

Another limitation is the reliance on self-reported measures. The study used self-reported measures of expressed humility, knowledge sharing, and inter-organizational

cooperation commitment, which could be subject to bias or social desirability effects.

Future research may benefit from using objective measures or triangulating data from multiple sources.

Furthermore, the study did not account for other factors that could impact the relationship between expressed humility and inter-organizational cooperation commitment, such as trust, power dynamics, or cultural differences. Future research may consider incorporating these factors to provide a more comprehensive understanding of the relationship.

6.3 Future Research Directions

The study mentioned focuses on the relationship between expressed humility, knowledge sharing, and inter-organizational cooperation commitment, and the moderating effects of performance improvement attribution and impression management attribution. Based on the results, several future research directions can be suggested:

First, we can replicate this study. Replication of the study with different samples, contexts, and measures could help to generalize the findings and validate the results.

Also, we can conduct replication of the study with a longitudinal study to explore the

causal relationship between expressed humility, knowledge sharing, and inter-organizational cooperation commitment.

Second, trust is a critical factor in inter-organizational cooperation and collaboration. Expressed humility may foster trust among boundary-spanning leaders and facilitate knowledge sharing and cooperation commitment. We have considered whether trust can be treated as the mediator. It has been showed in many literatures that trust has a direct and positive influence on commitment (Morgan & Hunt, 1994; Martins et al., 2017). However, the establishment of trust between organizations requires significant costs including time, efforts and resources (Harris et al., 2006). It is rational to presume that expressed humility, especially during the early stage of inter-organizational cooperation, is not directly associated with trust creation. Therefore, we do not select trust to be the intermediate variable for the mechanism. Future research could examine the role of trust as a mediator or moderator in the relationship between expressed humility, knowledge sharing, and inter-organizational cooperation commitment. For example, a study could investigate how trust levels between partners affect the relationship between expressed humility and inter-organizational cooperation commitment. Previous research has found that trust is positively related to knowledge sharing and inter-organizational cooperation (e.g., Jarvenpaa & Staples, 2001; Zaheer & Venkatraman, 1995). Additionally, research has shown that humble leaders are more likely to be trusted by their followers (Owens, Johnson, & Mitchell, 2013).

Third, this study also believe that other factors may affect the relationship between expressed humility, knowledge sharing, and inter-organizational cooperation commitment. For instance, personality traits, such as agreeableness or openness, may influence the perception and effects of expressed humility. Organizational culture, such as high or low power distance or collectivism, may also affect how expressed humility is perceived and acted upon. Power dynamics may also play a role in the relationship between expressed humility and cooperation commitment, particularly in situations where one partner has more power than the other. Future research could explore the role of these and other factors in the relationship between expressed humility, knowledge sharing, and inter-organizational cooperation commitment. For example, a study could investigate how organizational culture affects the way boundary-spanning leaders express humility and how that impacts inter-organizational cooperation. Previous research has examined the role of personality traits in knowledge sharing (e.g., Chiu, Owens, & Tesluk, 2016) and the impact of power dynamics on inter-organizational cooperation (e.g., Ring & Van de Ven, 1992).

References

- Adobor, H. 2006. The role of personal relationship in inter-firm alliances: Benefits, dysfunctions, and some suggestions. *Business Horizons*, 49: 473-486.
- Aldrich, H., & Herker, D. 1977. Boundary spanning roles and organization structure. *Academy of Management Review*, 2: 217-230.
- Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. 2006. Knowing your place: self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology*, 6: 1094-1110.
- Anderson, E., & Jap, S. D. 2005. The dark side of close relationship. *MIT Sloan Management Review*, 46: 75-82.
- Anderson, E., & Weitz, B. 1992. The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 29: 18-34.
- Anderson, J. C., & Narus, J. A. 1990. A model of distributor firm and manufacture firm working partnerships. *Journal of Marketing*, 54: 42-58.
- Anderson, N. H. 1968. Likableness ratings of 555 personality-trait words. *Journal of Personality and Social Psychology*, 3: 272-279.
- Ashford, S. J. 1986. Feedback-seeking in individual adaptation: A resource perspective. *Academy of Management Journal*, 29: 465-487.
- Ashford, S. J., Blatt, R., & VandeWalle, D. 2003. Reflections on the looking glass: A review of research on feedback-seeking behavior in organizations. *Journal of Management*, 29: 773-799.
- Barden, J. Q., & Mitchell, W. 2007. Disentangling the influence of leaders' relational embeddedness on inter-organizational exchange. *Academy of Management Journal*, 50: 1440-1461.
- Barrick, M. R., Mount, M. K., & Li, N. 2013. The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review*, 1: 132-153.
- Baumeister, R. F., & Jones, E. E. 1978. When self-presentation is constrained by the target's knowledge: consistency and compensation. *Journal of Personality and Social Psychology*, 6: 608-618.
- Bollen K., & Lennox R. 1991. Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin*, 2: 305-314.
- Bond, M. H., Leung, K., & Wan, K. C. 1982. The social impact of self-effacing attributions: The Chinese case. *The Journal of Social Psychology*, 2: 157-166.

- Boyd, N. G., & Taylor, R. R. 1998. A developmental approach to the examination of friendship in leader–follower relationship. *The Leadership Quarterly*, 9: 1–25.
- Brickson, S. (2000). The impact of identity orientation on individual and organizational outcomes in demographically diverse settings. *Academy of Management Review*, 25, 82-101.
- Bullock, F., translated by Feng, G. & Liu, Y. 2007. "*The Great Transformation: The Political and Economic Origins of Our Time*", Zhejiang People's Publishing House.
- Cameron K. S., Dutton J. E., & Quinn R. E. 2003. *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler, San Francisco.
- Cattell, R. B., & Burdsal Jr, C. A. (1975). The radial parcel double factoring design: A solution to the item-vs-parcel controversy. *Multivariate Behavioral Research*, 10(2), 165-179.
- Chen, M.-J., & Chen, M.-C. (2004). On the intricacies of the Chinese guanxi: A process model of guanxi development. *Asia Pacific Journal of Management*, 21(3), 305-324.
- Chen, Y., Friedman, R., Yu, E. H., Fang, W. H., & Lu, X. P. 2009. Supervisor–subordinate guanxi: Developing a three-dimensional model and scale. *Management and Organization Review*, 5: 375–399.
- Chen, Z. X., & Francesco, A. M.. 2003. The relationship between the three components of commitment and employee performance in China. *Journal of Vocational Behavior*, 62, 490-510.
- Chen, D. L., Schonger, M., & Wickens, C. (2016). oTree—An open-source platform for laboratory, online, and field experiments. *Journal of Behavioral and Experimental Finance*, 9, 88-97.
- Chen, Y. C., & Wu, W. Y. (2011). An empirical study of the effects of inter-organizational cooperation and knowledge sharing on organizational innovation. *Journal of Business Research*, 64(7), 728-736.
- Chiu, C.-Y., Owens, B. P., & Tesluk, P. E. (2016). Initiating and utilizing shared leadership in teams: The role of leader humility, team proactive personality, and team performance capability. *Journal of Applied Psychology*, 101(12), 1705–1720.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Comte-Spoonville, A. (2001). *A Small treatise on the great virtues*. New York: Henry Holt.

- Crant, J. M. 1996. Doing more harm than good: When is impression management likely to evoke a negative response? *Journal of Applied Social Psychology*, 26: 1454–1471.
- Crant, J. M. 2000. Proactive behavior in organizations. *Journal of Management*, 26: 435–462.
- Day, D. V., & Crain, E. C. 1992. The role of affect and ability in initial exchange quality perceptions. *Group and Organization Management*, 17: 380–397.
- Dienesch, R. M., & Liden, R. C. 1986. Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, 11: 618–634.
- Droge, C., Claycomb, C., & Germain, R. 2003. Does knowledge mediate the effect of context on performance? Some initial evidence. *Decision Sciences*, 34: 541-568.
- Exline J. J., Campbell W. K., Baumeister R. F., Joiner T., Krueger J., Kachorek L.V. 2004. *Humility and modesty*. Peterson C, Seligman M, eds. *Character Strengths and Virtues: A Hand- book and Classification* (Values in Action Institute, Cincinnati), 461–475.
- Exline J. J., Geyer A. 2004. Perceptions of humility: A preliminary study. *Self Identity*, 2: 95–114.
- Fodor, E. M. 1973. Disparagement by a subordinate, ingratiation, and the use of power. *Journal of Psychology*, 84: 181–186.
- Foy, P. S. 1999. *Knowledge management in industry*. Knowledge management handbook. New York: CRC Press.
- Friedman, R. A., & Podolny, J. 1992. Differentiation of boundary spanning roles: Labor negotiations and implications for role conflict. *Administrative Science Quarterly*, 37: 28-47.
- Gecas, V. 1982. The self-concept. *Annual Review of Sociology*, 8, 1-33.
- George, J. M. 2003. Positive organizational scholarship: foundations of a new discipline. *Administrative Science Quarterly*, 4: 1059-1062.
- Geyskens, I., & Steenkamp, J. E. M. 2000. Economic and social satisfaction: Measurement and relevance to marketing channel relationship. *Journal of Retailing*, 76: 11-32.
- Granovetter, M. S. 1973. The strength of weak ties. *American Journal of Sociology*, 78: 1360-1380.
- Granovetter, M. S. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 3: 481-510.

- Granovetter, M., & Swedberg, R.. 1992. *The Sociology of Economic Life*. Boulder Westview.
- Green, S. G., & Mitchell, T. R. 1979. Attributional processes of leaders in leader-member interactions. *Organizational Behavior and Human Performance*, 23: 429–458.
- Grenberg J. M. 2005. *Précis of Kant and the Ethics of Humility: A Story of Dependence, Corruption and Virtue* (Cambridge University Press, Cambridge, MA).
- Griffith, D. A., Zeybek, A. Y., & O'Brien, M. 2001. Knowledge transfer as a means for relationship development: A Kazakhstan-foreign international joint venture illustration. *Journal of International Marketing*, 9: 1-18.
- Gu, F. F., Hung, K., & Tse, D. K. 2008. When dose guanxi matter? Issues of capitalization and its dark sides. *Journal of Marketing*, 72: 12-28.
- Harris, Jared, and A. Zaheer. "Interorganizational trust." *O. Shenkar and J. Reuer (eds)* (2006): 169-197.
- Hayes, A. F. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: Second Edition: A Regression-Based Approach*. New York: Guilford Press.
- Hooker, J. (2012). Cultural differences in business communication. *The handbook of intercultural discourse and communication*, 389-407.
- Horowitz, L. M. , Wilson, K. R. , Turan, B. , Zolotsev, P. , Constantino, M. J. , & Henderson, L. 2006. How interpersonal motives clarify the meaning of interpersonal behavior: a revised circumplex model. *Personality & Social Psychology Review An Official Journal of the Society for Personality & Social Psychology Inc*, 1: 67.
- Huang, Y. , Luo, Y. , Liu, Y. , & Yang, Q. 2016. An investigation of interpersonal ties in inter-organizational exchanges in emerging markets: a boundary-spanning perspective. *Journal of Management*, 6: 1557-1587.
- Ibarra, H. 1993. Personal networks of women and minorities in management: A conceptual framework. *Academy of Management Review*, 18: 56–8.
- Ilies, R., Nahrgang, D. J., & Morgeson, P. F. 2007. Leader–member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92: 269–277.
- Jarvenpaa, S. L., & Staples, D. S. (2001). Exploring perceptions of organizational ownership of information and expertise. *Journal of Management Information Systems*, 18(1), 151–183.

- Kelley, H. H. 1967. *Attribution theory in social psychology*. In D. Levine (Ed.), Nebraska symposium on motivation: 192–238. Lincoln: University of Nebraska Press.
- Kipnis, D., & Schmidt, S. M. 1988. Upward-influence styles: Relationship with performance evaluations, salary, and stress. *Administrative Science Quarterly*, 33: 528–542.
- Kumar, N., Scheer, L. K., & Steenkamp, J. E. M. 1995. The effects of perceived interdependence on dealer attitudes. *Journal of Marketing Research*, 32: 348-356.
- Kwon, W. S., & Suh, T. (2004). Factors affecting the level of trust and commitment in supply chain relationships. *Journal of Supply Chain Management*, 40(2), 4-14.
- Lam, W., Huang, X., & Snape, E. 2007. Feedback-seeking behavior and leader-member exchange: Do supervisor attributed motives matter? *Academy of Management Journal*, 2: 348–363.
- Leach, D. J., Rogelberg, S. G., Warr, P. B., & Burnfield, J. L. (2018). Humble leadership: The influence of humility on team performance and leaders' reactions to team success and failure. *Organization Behavior and Human Decision Processes*, 147, 13-24.
- Li, J. J., Poppo, L., & Zhou, K. Z. 2008. Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms. *Strategic Management Journal*, 29: 383-400.
- Liang, D., Moreland, R. L., & Argote, L. (2014). Group versus individual training and group performance: The mediating role of transactive memory. *Group Processes and Intergroup Relations*, 17(3), 328-341.
- Lincoln, J. R., & Miller, J. 1979. Work and friendship ties in organizations: A comparative analysis of relation networks. *Administrative Science Quarterly*, 24: 181–199.
- Luo, Y. (2002). Building trust in cross-cultural collaborations: Toward a contingency perspective. *Journal of Management*, 28(5), 669-694.
- Luo, Y. 2007. *Guanxi and business* (2nd ed.). Singapore: World Scientific.
- Marsden, P. V., & Campbell, K. E. 1984. Measuring tie strength. *Social Forces*, 63: 483-501.
- Martins, D. M., Faria, A. C. D., Prearo, L. C., & Arruda, A. G. S. (2017). The level of influence of trust, commitment, cooperation, and power in the interorganizational relationships of Brazilian credit cooperatives. *Revista de Administração (São Paulo)*, 52, 47-58.

- Means J. R., Wilson G. L., Sturm C., Biron J. E., Bach P. J. 1990. Theory and practice: Humility as a psychotherapeutic formulation. *Counseling Quart.* 2:211–215.
- Mischel, W., & Shoda, Y. 1995. A cognitive-affective system theory of personality: reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 2: 246-268.
- Mohr, J. J., & Spekman, R. 1994. Characteristics of partnership success: Partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal*, 15: 135-152.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of marketing*, 58(3), 20-38.
- Morris J.A., Brotheridge C.M., Urbanski J.C. 2005. Bringing humility to leadership: Antecedents and consequences of leader humility. *Human Relations*, 10:1323–1350.
- Morrison, E. W., & Bies, R. J. 1991. Impression management in the feedback-seeking process: A literature review and research agenda. *Academy of Management Review*, 16: 522–541.
- Morrison, E. W., & Phelps, C. C. 1999. Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42: 403–419.
- Nielsen, R., Marrone, J.A., & Slay, H.S. 2010. A new look at humility: exploring the humility concept and its role in socialized charismatic leadership. *Journal of Leadership & Organizational Studies*, 1: 33-43.
- Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z., & Song, L. J. 2014. Humble chief executive officers\' connections to top management team integration and middle managers\' responses. *Administrative Science Quarterly*, 1:34-72.
- Owens B. P., Hekman D. R. 2012. Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes. *Academy of Management Journal*. 4:787–818.
- Owens, B. P., & Hekman, D. R. 2016. How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus. *Academy of Management Journal*, 3: 1088–1111.
- Owens, B. P., Johnson, M. D., & Mitchell, T. R. (2013). Expressed humility in organizations: Implications for performance, teams, and leadership. *Organization Science*, 24(5), 1517–1538.

- Palmatier, R. W., Dant, R. P., & Grewal, D. 2007. A comparative longitudinal analysis of theoretical perspectives of inter-organizational relationship performance. *Journal of Marketing*, 71: 172-194.
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. 2006. Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70: 136-153.
- Park, S. H., & Luo, Y. 2001. Guanxi and organizational dynamics: Organizational networking in Chinese firms. *Strategic Management Journal*, 22: 455-477.
- Peng, M. W., & Heath, P. 1996. The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *Academy of Management Review*, 21: 492-528.
- Peterson C., Seligman M. 2004. *The Values in Action VIA Classification of Strengths*. Values in Action Institute, Cincinnati.
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2), 77-98.
- Ring, P. S., & Van de Ven, A. H. (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13(7), 483-498.
- Ryan, D. S. 1983. Self-esteem: An operational definition and ethical analysis. *Journal of Psychology and Theology*, 11, 295-302.
- Sass, D. A., & Smith, P. L. (2006). The effects of parceling unidimensional scales on structural parameter estimates in structural equation modeling. *Structural equation modeling*, 13(4), 566-586.
- Su, C., Yang, Z., Zhuang, G., Zhou, N., & Dou, W. 2009. Interpersonal influence as an alternative channel communication behavior in emerging markets: The case of China. *Journal of International Business Studies*, 40: 668-689.
- Stock, R. M. 2006. Inter-organizational teams as boundary spanners between supplier and customer companies. *Journal of the Academy of Marketing Science*, 34: 588-599.
- Tangney, J. P. 2000. Humility: Theoretical perspectives, empirical findings, and directions for further research. *Journal of Social and Clinical Psychology*, 19, 70-82.
- Tangney J. P. 2002. *Humility*. Snyder CR, Lopez SJ, eds. *Handbook of Positive Psychology*. Oxford University Press, New York.
- Tangney J. P., & Price, J. 2000. Humility: theoretical perspectives, empirical findings and directions for future research. *Journal of Social and Clinical Psychology*, 1: 70-82.

- Templeton J. M. 1997. *Worldwide Laws of Life*. Templeton Foundation Press.
- Tsang, E. W. K. 1998. Can guanxi be a source of sustained competitive advantage for doing business in China? *The Academy of Management Executive*, 12: 64-73.
- Tushman, M. L., & Scanlan, T. J. 1981. Characteristics and external orientations of boundary spanning individuals. *Academy of Management Journal*, 24: 83-98.
- UhlBien, M. 2006. Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly*, 17: 654–676.
- Uzzi, B. 1997. Social structure and competition in inter-organizational networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42: 35-67.
- Vera, D., & Rodriguez-Lopez, A. 2004. Strategic virtues: Humility as a source of competitive advantage. *Organizational Dynamics*, 33: 393-408.
- Wayne, S. J., & Ferris, G. R. 1990. Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology*, 75: 487–499.
- Wayne, S. J., & Kacmar, K. M. 1991. The effects of impression management on the performance appraisal process. *Organizational Behavior and Human Decision Process*, 48: 70–88.
- Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leader–member exchange: A social exchange perspective. *Academy of Management Journal*, 40: 82–111.
- Westphal, J. D., Boivie, S., & Chng, D. H. M. 2006. The strategic impetus for social network ties: Reconstituting broken CEO friendship ties. *Strategic Management Journal*, 27: 425-445.
- Wright, M., Filatotchev, I., Hoskisson, E. E., & Peng, M. 2005. Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, 42: 1-33.
- Yan, A., & Gray, B. (2001). Bargaining power, management control, and performance in US-China joint ventures: A comparative case study. *Journal of International Business Studies*, 32(4), 749-776.
- Zaheer, A., & Venkatraman, N. (1995). Relational governance as an interorganizational strategy: An empirical test of the role of trust in economic exchange. *Strategic Management Journal*, 16(5), 373–392.
- Zhang, J., Soh, P., & Wong, P. 2010. Entrepreneurial resource acquisition through indirect ties: Compensatory effects of prior knowledge. *Journal of Management*, 36: 511-536.

- Zhang, X. A., Li, N., & Brad Harris, T. 2015. Putting non-work ties to work: the case of guanxi in supervisor–subordinate relationship. *The Leadership Quarterly*, 1: 37-54.
- Zhang, Y., & Zhang, Z. 2006. Guanxi and organizational dynamics in China: A link between individual and organizational levels. *Journal of Business Ethics*, 67: 375-392.
- Zollo, M., Reuer, J. J., & Singh, H. 2002. Inter-organizational routines and performance in strategic alliance. *Organization Science*, 13: 701-713.
- Zukin, S., & DiMaggio, P.. 1990. “introduction,” in Sharon Zukin and Paul Dimaggio, eds., *Structures of Capital: The Social Organizagion of the Economy*. New York: Cambridge University Press.

APPENDIX I

Questionnaire for Boundary Leader in Partner A's Team (Time 1)

Dear Sir/madam,

It's a joint research initiated by Antai School of Economic and Management, Shanghai Jiao Tong University and Lee Kong Chian School of Business, Singapore Management University. Thanks for taking the time to help fill in this questionnaire. The purpose of the survey is academic, and there is no right or wrong answer. Please fill in the questionnaire according to the recalled project what you were working on with other organization. All data you provide treated in strict confidence. Your answers will not be seen by anyone in the company, including your boss, colleagues and subordinates. Your true answers are crucial to our research results. Thank you very much for your cooperation.

In your honest opinion, should we use your data in our analyses in this study?

Yes No

Your demographic information

1. Gender:
2. Age:
3. Education:
4. Working time in the company: _____ (month) _____ (year)
5. Working time as leader of the team: _____ (month) _____ (year)

Cooperation Experience

Please recall a recent cooperation experience within the past year and briefly describe the content of the cooperation experience.

Name of cooperation project: _____

Name of partner organization/team: _____

Relationship duration with partner organization/team: _____ (how many months)

Do you have a close relationship with this business partner: _____ (Yes or No)

Indicate the amount of cooperation project:

under 0.5 M

0.5 – 5M

5 – 10M

10 – 50 M

Above 50 M

The overall cooperation experience is:

Very unsatisfactory 1 2 3 4 5 Very satisfactory

The cooperation experience is:

Unsuccessful ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 Successful

Brief summary about the cooperation project:

Leader Expressed Humility

Please respond to the following questions with respect to your partner leader with the following scale where 1 means strongly disagree, 2 means disagree, 3 means agree, 4 means agree, 5 means strongly agree.

1. The leader of Partner B actively seeks feedback, even if it is critical.
2. The leader of Partner B acknowledges when others have more knowledge and skills than himself/herself.
3. The leader of Partner B admits when he/she doesn't know how to do something.
4. The leader of Partner B shows appreciation for the contributions of others.
5. The leader of Partner B takes notice of the strengths of others.
6. The leader of Partner B often compliments others on their strengths.
7. The leader of Partner B is willing to learn from others.
8. The leader of Partner B is open to the ideas of others.
9. The leader of Partner B is open to the advice of others.

Attributed motives of Expressed Humility

The leader of Partner B may have expressed some forms of humble behaviors toward your team/organization more or less. Why do you think he/she expresses such behaviors toward your team/organization?

1. The leader of Partner B desires to discover what his responsibilities are.
2. The leader of Partner B desires to discover exactly what is expected of our team/organization.
3. The leader of Partner B desires to perform better.
4. The leader of Partner B desires to learn.
5. The leader of Partner B desires to understand better what I want from him/her.
6. The leader of Partner B desires to strengthen our working relationship.
7. The leader of Partner B desires to enhance his image.
8. The leader of Partner B desire to build-up for a later exchange.
9. The leader of Partner B desires to show-off his expertise.
10. The leader of Partner B desires to look good.
11. The leader of Partner B desires to influence how you see him.
12. The leader of Partner B desires to capture your attention on him.
13. The leader of Partner B desires to obtain recognition or other organizational rewards.
14. The leader of Partner B desires to create an impression.

APPENDIX II

Questionnaire for Boundary Employee in Partner A's Team (Time 2)

Dear Sir/madam,

It's joint research initiated by Antai School of Economic and Management, Shanghai Jiao Tong University and Lee Kong Chian School of Business, Singapore

Management University. Thanks for taking the time to help fill in this questionnaire.

The purpose of the survey is academic, and there is no right or wrong answer. Please fill in the questionnaire according to the project what you are working on with other organization. All data you provide treated in strict confidence. Your answers will not be seen by anyone in the company, including your boss, superior and colleagues.

Your true answers are crucial to our research results. Thank you very much for your cooperation.

In your honest opinion, should we use your data in our analyses in this study?

Yes No

Based on the project what you were working on with other organization now, please answer the question where 1 means strongly disagree, 2 means disagree, 3 means agree, 4 means agree, 5 means strongly agree.

Cooperation Experience (*Summarize of Cooperation Experience in Leader's Questionnaire*)

Questions below are used to test knowledge sharing from partner B.

1. Our team/organization have provided a great deal of knowledge about competitive advantages to partner B.
2. Our team/organization have provided a great deal of knowledge about market potential to partner B.
3. Our team/organization have provided a great deal of knowledge about competitors to partner B.
4. Our team/organization have provided a great deal of knowledge about their competitors to partner B.

Inter-organizational cooperation commitment

Questions below are used to test cooperation commitment for partner B.

1. Our team intend to continue working with partner A because we feel as if they are part of family.

2. Our team would not replace partner A, even if another partner made a better offer.
3. Given the same business philosophy as the partner, our team feel we ought to continue our relationship with partner A.
4. Our team have a strong sense of loyalty to partner A, so we continue to work with them.
5. Given all the things we have done with the partner over the years, our team feel we ought to continue our relationship with Partner A.

APPENDIX III

Table 1 Unstandardized Coefficients of the Model

Variable	Performance improvement attribution		Impression management attribution		Inter-organizational cooperation commitment	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Intercept	1.02	.21	1.22	.38	.67	.43
Gender	.06	.08	.11	.10	-.20*	.08
Age	<.01	.01	<.01	.09	-.01	.01
Education	.09	.06	.28***	.08	.09	.07
Organizational tenure	-.01	<.01	.01	<.01	-.01***	<.01
Work tenure as a leader	<.01***	<.01	<.01	<.01	<.01***	<.01
Relationship duration with partner	<.01***	<.01	.01**	<.01	.01***	.01
Close relationship with partner	-.37**	.12	-.34*	.14	.08	.14
The amount of cooperation project	-.12***	<.03	-.01	.05	-.05	.03
The overall cooperation experience	-.01	.08	-.23*	.11	.17	.12
The cooperation experience	<.11*	.05	-.07	.07	.20*	.09
Expressed humility	.75***	.05	.72***	.12	.29*	.14
Knowledge sharing	.02	.04	.18*	.08		
Performance improvement attribution					.12	.11
Impression management attribution					.09	.09
Expressed humility* Knowledge sharing	.44***	.07	.26*	.11		
R ²	.64***	.04	.34***	.04	.51***	.04

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Unstandardized regression coefficients are reported.

Table 2 Summary of Indirect Effect of the Model

Indirect effects	Estimate	95% confidence intervals
The indirect of Expressed humility on Inter-organizational cooperation commitment via performance improvement attribution	.09	[-.07, .24]
High-level knowledge sharing	.05	[.03, .13]
Low-level knowledge sharing	.14	[-.10, .37]
Difference between high or low-level of knowledge sharing	.09	[-.06, .26]
The indirect of Expressed humility on Inter-organizational cooperation commitment via impression management attribution	.07	[-.06, .15]
High-level knowledge sharing	.05	[-.03, .11]
Low-level knowledge sharing	.09	[-.07, .21]
Difference between high or low-level of knowledge sharing	.04	[-.02, .14]

Note. All estimates were tested for significance using a Monte Carlo simulation with 20,000 replications to construct 95% confidence intervals for the indirect effects.